

Wirginia Wildlife

Dedicated to the Conservation of
Virginia's Wildlife and Related Natural Resources
and to the Betterment of
Outdoor Recreation in Virginia

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IN THIS ISSUE PAGE
Guest Editorial: Trouble Along Our Coastline 3
What The Pittman-Robertson Act Has Meant To Virginia. 4
Tom Turkey Test Number Two 8
Fitting Out Your Outboard For Fun and Safety
(Part III) 10
Bird of the Month: The Indigo Bunting 12
Conservationgram
Virginia Hunting Seasons At A Glance 14
Dad-Blamed Doves
Dove Hunting
Hunting Marsh Birds In Virginia
Little Whitefoot
Youth Afield
The Drumming Log 24
On The Waterfront
Letters
16th Annual Wildlife Essay Contest Announcement 28

COVER: A typical Buggs Island Lake (Kerr Reservoir) scene—a five-pound striped bass in pursuit of a school of bluegills, with two largemouth bass looking on. September is a good month to fish for stripers both above and below Kerr Dam in Mecklenburg County. Our cover artist: Duane Raver of Cary, N. C.

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LETTERS

Trouble Along Our Coastline

WHY should we care what happens along our coastline? How on earth can changes of our coastline, especially "physical improvements," affect this generation, our pleasures, our children's futures? Everyone of us almost without exception is aware of the vast coastal areas of our country. They stretch from Maine to Brownsville, Texas, on the Atlantic and Gulf coasts of our country, and from San Diego, California, northward to end in the Arctic Circle.

Time was when you and I both said "This great coastline is inexhaustible; man surely cannot change it." We have hiked through miles of swamp, poled our boats through twisting canals and brackish backwaters, thinking and hoping we would soon break through to open water. Is this vast coastal area inexhaustible insofar as desirable habitat for fish and wildlife is concerned? Can it be "over-

developed"?

The coastline means many things to many people. It is the means by which our commerce reaches the other nations of our world. It is along the coastline of our nation that almost three-fourths of our people live. Our greatest industries tend to spring up along our waterways and coastlines. Over 500,000 of our people make their living from commercial fishing, harvesting the aquatic resources which abound adjacent to and are dependent upon our coastline.

A rapidly increasing proportion of recreation seekers of many millions of people use our coastal areas for various purposes, including sport fishing and

hunting.

Thus, with these multiple uses of our coastal areas increasing far faster than the some 1.8 percent per yearly increase in our population, every effort must be made to plan for the comprehensive development of our coastal areas. The coastline of our country should be developed to the maximum for all users, all interests, not only those who find a ready profit from one form of development now. Looking into the future, the development must be planned and studied and projected into the future to include the fullest possible coordination so that some users do not gain at the expense of others to the ultimate detriment of the nation's welfare. Of course, this means compromise. From the recreation seekers, the nature lover, the commercial fisherman, the best development perhaps is accompanied by the least physical change in the terrain and the adjacent waters.

Why is it we need multiple development of our coastline? Because the great natural resources of our coastline can be irreparably damaged by the kind of hit or miss, uncoordinated development that is proceeding in some areas at the present moment. Over the past 300 years we have systematically destroyed many of the most productive coastline areas and rivers from the standpoint of fish and wildlife production. Even today, on one hand we are trying to recover many of these areas at great cost to our national economy, while on the other hand destroying other vast areas which have remained relatively natural and unchanged up to now.

Neither the states nor the Federal agencies have the facilities or staff to adequately protect the natural resources affected by these projects. Furthermore, we lack the fundamental basic fund of knowledge on the effect of changes in the inshore environment on the natural resources of these areas. We just don't know what effect changes in the salinity might have on the survival of shrimp, oysters, croakers, spotted trout, drum, and other fish which utilize these inshore areas during their early life. We don't know the effect of these changes on the aquatic plants which are needed not only by the larval and post-larval stages of these important fish and shellfish but also by the aquatic birds and ducks and other wildlife inhabiting the vast marsh areas along our coast.

The destruction of this inshore environment goes on at a far faster rate than do our studies. As a result, we are getting farther and farther behind and are

not adequately protecting the inshore coastal environment.

At the present time, unilateral developments along our coastline which change the essential physical characteristics of this inshore aquatic and shore environment are threatening the existence of the great fisheries and wildlife resources of our coasts.

Our first job is to assemble available knowledge and acquire more knowledge about the effects of physical alterations of the coastal environment on these great natural resources. With such knowledge we must proceed to develop coordinated planning which will insure the perpetuation of the fish and wild-life resources dependent upon this environment. In this way, if we can work quickly, we may prevent the irreplaceable loss of the greatest fisheries resources of our nation.

Extracted from an address by Donald L. McKernan, Director, U.S. Bureau of Commercial Fisheries, at the Annual Convention of Outdoor Writers Association of America, at Hot Springs, Arkansas, June 9, 1959.

Stocked Streams Being Posted

I WOULD like for the Game Commission to answer one question openly in the VIRGINIA WILDLIFE magazine that I and a thousand other trout fishermen would like to have answered. The question is, Can a landowner along a trout stream legally post his land bordering said stream a day or two following stocking of trout by the Game Commission? I was under the impression that once a landowner had given permission for stocking, he could not post his land. I saw this occur this year on Piney River which, in my opinion, is the finest trout water in the state. After many unsuccessful attempts to find out why the stream was posted. I am taking the liberty of asking the Game Commission for the answer.

I feel that we, the fishermen who put out money for licenses, deserve a little protection. On one occasion I found myself in an embarrassing position. I was approached by a native along the bank of Piney River one day and told that I was trespassing on private land and would be given a ticket if I did not leave. I was somewhat puzzled as this same water had been open, stocked water the day before. Upon asking the person when the land had been posted, he told me that the stream was posted as of then. I left the so-called posted water mad but quietly. Three days later I believe I could safely say that a third of the land along the stocked stream was posted.

It seems to me that the Game Commission and the landowners along the stocked trout streams could have a better understanding and that trout fishermen could be better protected when they take to the streams in the spring. I realize that there is a small percentage of people who have no respect for another's property, tear down fences, throw trash around, etc., but there is a very large percentage of fishermen who are law abiding and respect the property of others. I feel sure that there could be a better understanding between the landowners and trout fishermen and would appreciate it very much if the Game Commission could come up with an answer to this problem.

> Charles Carroll Duff Lynchburg, Virginia

In spite of careful checking before and after stocking, situations like this occasionally occur. Landowners usually honor their verbal or written agreement with the Commission, which is secured prior to stocking. An investigation of this case is now being made.—Ed.

Kudos

YOUR VIRGINIA WILDLIFE certainly is one of the foremost among the state publications.

Arthur H. Carhart Denver, Colorado

I WOULD like to say that your publication is without doubt the finest of its type I have ever come across. Certainly you and your staff are to be congratulated.

Carl S. Wittmer, Jr.
Hagerstown, Maryland

What The Pittman-Robertson Act Has Meant To Virginia

By CHESTER F. PHELPS

Executive Director

Virginia Commission of Game and Inland Fisheries

DURING the last 25 years the progress in game management has been phenomenal. Undoubtedly, more was accomplished in the fields of game research and game management in this period than in all the preceding years. The work of the pioneers—Leopold, Stoddard, Errington and others—had earlier laid the foundation for this development, but two factors were lacking—men and money.

In the early days it was difficult for interested young men to get a formal education in game management. The establishment of the Cooperative Wildlife Research Units in several of the nation's land grant colleges solved this problem, and by the late 1930's men with Master's degrees in game management began to trickle out of these colleges.

Men alone, however, were not enough to do the job. There had to be funds to pay these men to conduct the research and development projects, the need for which was becoming more apparent with each passing year. The state game and fish departments, as a rule, had been operating on a shoestring with barely enough funds to pay for current law enforcement, and few were doing anything worthwhile in the field of scientific game management because of financial limitations.

Many far-sighted conservationists throughout the country realized the problem and the idea was conceived of having the then 10 percent Federal excise tax on sporting arms and ammunition channeled to the states to pay for needed wildlife restoration. This proposal was presented in 1936 to the International Association of Game, Fish and Conservation Commissioners, which promptly endorsed the idea. With the backing of practically every state in the country, as represented by the International, a bill was drafted and sponsored in the Congress by the late Senator Kay Pittman of Nevada and Senator (then Representative) A. Willis Robertson of Virginia. This bill was most ably presented and supported in the Congress and passed without opposition to take effect July 1, 1938. While formally known as the Federal Aid to Wildlife Restoration Act, it has been popularly known as the Pittman-Robertson Act.

The importance of the funds made available to the states by this Act can scarcely be over-estimated. For example, in Virginia, during the fiscal year 1937-38, the total expenditure for all game restoration work was about \$26,000, and a large portion of this went into the raising of quail at the game farm. With the passage of the Pittman-Robertson Act, the following year saw only \$8,000.00 of Federal aid money supplementing state funds in Virginia, as there had not been time to get a program organized. In 1939-40, Federal aid, or Pittman-Robertson, projects totaled over \$28,000, an amount in itself more than the total budget of two years previous. During the first 10 years

Prior to his promotion to the position of executive director on July 1, 185%, Mr. Phelps had the longest service record of any state Pittman-Robertson coordinator (1939-5%).

of the Act, 1939 through 1948, a total of \$165,066 was made available and devoted to wildlife restoration projects in Virginia.

The first Pittman-Robertson Project in Virginia was destined to achieve nationwide recognition and to be of more direct immediate benefit to the hunters of Virginia than any other work attempted. This was the restoration of our deer herds, particularly west of the Blue Ridge. The story is quite familiar to most. Through a combination of timber cutting, poaching and hunting with dogs, deer had been exterminated by the early 1900's west of the Blue Ridge except for a few remnants in two or three counties. By 1938, game biologists knew that the forest had reached the stage where it would again support deer, but they realized, too, that unless a systematic stocking program was started decades would pass before there would be a shootable surplus. In the first 10 years of the Pittman-Robertson Act. 1.373 deer were released in our western mountains under rigid protection. Game managers knew, too, that self-hunting dogs and poachers constituted the greatest threat to these newlystocked animals, so the deer were released in selected areas constantly patrolled by full-time game managers. In addition, deer were not stocked in any county until the Board of Supervisors had passed an ordinance confining the dogs. at least during the major portion of the year. Competition among the counties for stocking of deer was such that no difficulty was encountered in securing these ordinances. Deer were obtained from wherever possible—Michigan, North Carolina. Pennsylvania and Wisconsin. In 1938, records



Commission Photo by Shomon

Ten years ago the "P-R" program in Virginia involved these men, among others (from left): executive director I. T. Quinn, game biologist Lem Richards, education chief J. J. Shomon, game chief Chester Phelps, George Washington National Forest administrative assistants Pete Hanlon and Dick Elliott, and game manager Cam Huffer, who is pointing to a salt block used by deer.



Commission Photo by Kesteloo
The Virginia deer restoration program, made possible with PittmanRobertson funds, has been eminently successful. Here, game biologist
Max Carpenter checks deer bagged by Douglas and Earnest Cox and
Durwood Bontlam.



Photo by Leonard Lee Rue, III
Federal aid funds are also being used to restore the wild turkey to
its former range in southwestern Virginia through live-trapping and
transplanting of wild-reared birds.

indicate there were less than 200 deer being legally harvested annually west of the Blue Ridge. During the 1961 hunting season, over 16,000 were bagged by happy sportsmen. When it is realized that this occurred not by accident but by a carefully planned program executed over a period of years it serves as an outstanding example of what scientific game management and adequate funds can do.

Not all Pittman-Robertson projects enjoyed the same success as the restoration of our deer. Game biologists are apt to blush when they reflect on the nearly 9,000 quail stocked under several successive Pittman-Robertson projects. It can be said, however, that while the majority of the biologists knew what is now common knowledge, i.e., that the way to quail abundance is not through the stocking of quail, this view was not shared by most of the public. To a lesser degree the same can be said about the stocking of pen-reared wild turkeys. This was continued for years and enjoyed some limited success but certainly not in proportion to the effort and money expended.

At least one project was perhaps too successful. About 1940, beaver pelts were averaging \$25.00 each on the market. The beaver was known to be a "natural conservationist," and the idea was advanced that if the beaver could be restored in Virginia, not only would their activities improve stream flow but their pelts would furnish a significant supplement to farm incomes. Beaver were stocked in many places in the state and became established without difficulty.

(Continued on page 6)

Silver Anniversary of Federal Assistance to Wildlife

September 2, 1962, marks the 25th anniversary of the Pittman-Robertson Act, "An act to provide that the United States shall aid the states in Wildlife Restoration projects, and for other purposes." Conceived in an era when game shortages were widespread, the act earmarks the 11 percent manufacturer's excise tax levied against sporting arms and ammunition for wildlife projects in the various states. Twenty-five years and \$219,000,000 later, some of the accomplishments are spectacular.

At the time of the act's passage, most southeastern states had only a few scattered deer herds and turkey flocks. Therefore, some of the first work was done in the restoration of these species. Virginia is still working on turkey restoration, and many other southeastern states are still actively engaged in deer restoration.

Other projects which have received a great deal of emphasis, especially in Virginia, are the improvement of food and cover for both big and small game.

Pittman-Robertson federal aid funds are accumulated from an 11 percent manufacturer's tax levied by the federal government on all sporting arms and ammunition. The tax is charged against the price which the manufacturer receives for the merchandise and is in turn included in the retail price.

This money is accumulated in the Federal Treasury and distributed each year to the states by the U. S. Fish and Wildlife Service. This agency deducts up to eight per cent of the total amount for administering the program and supervising the use of money. The remainder is divided among the states on the basis of land area and number of licensed hunters. Half of the total is divided on the ratio of the land area of the state to the total land area of the United States. The other half is apportioned by the ratio of that state's licensed hunters to the total number of licensed hunters in the nation.

In order to use the money, the states must foot 25 percent of the bill, and the Federal funds may be used for the remaining 75 percent. Only projects meeting the rather rigid specifications for the act may be financed on these terms. Approved projects include game restoration, land acquisition, habitat improvement, and research.

The far-sighted sponsors of the act were the late Senator Key Pittman of Nevada and Senator A. Willis Robertson of Virginia. The idea for this program arose from the "dust bowl" days of the 1930's when the nation's waterfowl were feared doomed. Fish and game departments of the various states, operating on restricted budgets made up almost entirely from hunting and fishing license fees, were unable to cope with such widespread wildlife problems. In many states deer, turkey, and even quail and other small game were diminishing each year. It was felt that, with financial assistance and a well directed program of effort, this tide could be reversed.

The federal aid program was largely responsible for the scientific approach to game management which has developed in most states since its passage. The first "staff" of game biologists was added to the Virginia Game Commission's organizational set-up in 1940, when five game biologists were employed with federal aid funds.

During the World War II years, the appropriations to the states were cut and a reserve was allowed to accumulate. No one knew how long the conflict would last and with a large portion of the country's sportsmen in the armed forces, license revenues dropped during the period. The shortage of civilian guns and ammunition further curtailed hunting. States were short of money and personnel so most could not have made good use of their full allotment. This surplus was divided among the states from 1956 through 1960 at 20 percent per year.

The years during which this surplus was being passed out were the peak years of federal aid apportionments. With the addition of Alaska and Hawaii to the list of eligible states and with increased allotments for the U. S. territorial possessions of Guam, Puerto Rico, and the Virgin Islands, the individual states' share of federal aid funds has declined in recent years.

While in some instances they have benefitted stream flow, they have proved to be a nuisance in many locations, particularly in the mountains. Contributing to the now unwanted increase was a decline in the popularity of beaver fur. To-day many feel the difficult pelting job is scarcely worth the financial return.

Obviously, the many worthwhile projects initiated with Pittman-Robertson funds could not have been successful without trained biologists. Here, again, Federal aid monies made it possible for Virginia, as well as other states, to establish the core of wildlife management experts which are the backbone of today's game management program. Under Pittman-Robertson assistance, the first full-time biologist was lired in 1939, and others were added as they could be located and as the necessity for their services became more apparent. While not as spectacular as the development projects, several research projects which paved the way for later development projects were initiated by these biologists.

As conditions changed, so did the aspects of the Pittman-Robertson program. Today, deer stocking has been completed. The stocking of pen-reared quail and wild turkeys has been discontinued. Research management continues on the most pressing problems, and the purchase of land to be held in public ownership to serve the needs of the present and future generations is creating a monument to far-sighted conservationists. The current Pittman-Robertson projects being administered by the Commission of Game and Inland Fisheries are concentrated in three major areas designed to make lands throughout the state produce sustained annual crops of wild game for recreational use.

Since approximately 85 percent of Virginia's wildlife habitat remains in private ownership it is only logical that management of this area is a primary responsibility. Through the statewide Upland Game Development Project (PR28D) our biologists are perfecting new and more efficient wildlife management techniques, advising individual landowners, preparing farm or area plans, and providing limited quantities of planting materials which might not be available on the open market. Biologists also take advantage of every opportunity to meet with sportsman, civic and student groups for the purpose of teaching sound wildlife management techniques for application on private lands,

Through the statewide Upland Game Development Project ages lands owned by other government agencies, corporations and private individuals for public hunting. Wildlife management on these lands is partially financed with Pittman-Robertson funds, in accordance with annual work plans prepared by the division and approved by the landowners. The management of approximately 115,000 acres of Commission-owned lands for public hunting is another important phase. Here, the multiple-use concept of management is applied with emphasis on the production of game species, and every effort is made to make such lands self-supporting through the sale of timber and other prodnets. This phase of the overall program is continually expanding through the acquisition of additional public hunting areas through cooperative agreement or purchase by the Commission. At the present time about 1.900,000 acres is being managed for public use under operations incorporated in Pittman-Robertson projects 17-D, 28-D and 18-D.

Sound management necessitates continuous research designed to produce information for use in every day work. Through Pittman-Robertson projects 39-R and 40-R we



Commission Photo by Kesteloo

The 18,500-acre Gathright Wildlife Management Area in Bath and Alleghany Counties (above) was the first area purchased by the Virginia commission with "P-R" funds.



Commission Photo by Cutler

Habitat improvement and sportsman access work on the national forests is done by state game managers like C. R. Sparks (Poor Valley Unit, Jefferson Forest). "P-R" funds cover 75 percent of the cost of such work.



Commission Photos by Kesteloo

Equipment depots for state vehicles are maintained on the national forest game management units, where management work includes the construction of clearings and water holes for game.





Commission Photos by Kesteloo

Game biologist Jim Engle posts a sign typical of those used in areas where deer brought from Michigan and Pennsylvania were liberated and protected to form the nucleus of today's large herds.



Game division personnel sack and distribute tons of wildlife food and cover plant seed to private landowner cooperators.



Today's sportsmen are reaping the harvest of 25 years of game management effort. Intensively managed waterfowl refuges (as below) have also been purchased with "P-R" funds.

S.C.S. Photo



are learning more about upland game, big game and waterfowl species requirements and thus are able to maintain or increase populations in most instances. Through the use of facts resulting from research and investigations we are setting hunting seasons and bag limits which assure adequate. safe annual harvests.

Sound management is the answer to our sportsmen's immediate outdoor recreation needs, and the farsightedness of great men in bringing forth the Pittman-Robertson Act has assured Americans that this important wildlife resource will be preserved for future generations to enjoy.

Gathright Area Dedicated To Sen. Robertson

The Gathright Wildlife Management Area in Bath and Alleghany counties, owned by the Commission of Game and Inland Fisheries, was officially dedicated to United States Senator A. Willis Robertson at a banquet in Washington, D. C., Aug. 7, 1962. Conservation leaders from state, federal and private organizations attended the banquet to commemorate the 25th anniversary of the "Federal Aid to Wildlife Restoration Act" which Senator Robertson and the late Senator Key Pittman of Nevada sponsored in Congress. A plaque will be placed on the area with the following inscription: The GATHRIGHT WILDLIFE MANAGEMENT AREA, dedicated to United States Senator A. WILLIS ROBERTSON in grateful recognition and appreciation of his many contributions to the sportsmen of Virginia and the Nation, July 1962."

Hunting Hints

Hunters who seek out wilderness game should take certain precautionary measures before going afield. The following items serve as a basic auxiliary kit for wilderness hunting:

- 1. A sharp knife. While one knife is a necessity, two are even better. Why not take a good sturdy clasp knife (Swiss army type, for instance) as well as the usual sheath knife.
- 2. A 20-foot length of strong nylon rope. Light and compact, the extra length will come in handy in handling big game kills. If possible, also carry a small, lightweight pulley (aluminum or light alloy).
- 3. A good compass. Avoid cheap models: this is one area where the hunter shouldn't skimp. If you do not know how to use a compass correctly, buy a small explanatory book.
- 4. Buy a topographic map of the area you are going to hunt. They are available from the U. S. Geological Survey in Washington. D. C. Keep map in waterproof pouch.
- 5. Take a good supply of kitchen matches in a waterproof container. Keep these in reserve and never use them unless absolutely necessary. Instead, carry at least one good wind-proof lighter and a supply of other regular matches.
- 6. Take along some concentrated food or chocolate bars. Light in weight, they will provide energy when it is needed most. If you are unsure of an area's water, take along a small box of water purification tablets.
- 7. A light waterproof ground cloth of 6' x 6'. This will serve any number of useful functions if the hunter is caught overnight in the woods. Synthetic materials supply the needed lightness.
- 8. Make a small packet containing the following items: fishhooks: fish line; sinkers: nylon line for small snares.
- 9. It might not hurt to read a book or two on survival or "living off the land." After all, if there is a simple known way of doing things, why not take advantage of other people's knowledge and save yourself a lot of trouble? to use a compass correctly, buy a small pocket-sized explanatory book. Take the book along with you: it will resolve many of your doubts.

provide any number of useful functions if the hunter is



Commission Photos by Kesteloo Successful spring gobbler hunter Thomas M. Overby proudly shows his trophy to Game Commission Director Phelps.

Tom Turkey Test Number Two

By JACK V. GWYNN and C. H. "KIT" SHAFFER

HE month of April has always been famous for its spring showers. To the sportsmen of Virginia it has meant gardening, lawn mowing, spring house cleaning, with an occasional fishing trip in between. Hunting season was eight months in the future, and there was nothing much to look forward to except an expensive vacation. Now, in 1962, April had become one of the most exciting months of the year. Not only did trout season open and striped bass (weighing up to 15 pounds) begin their spawning runs up the Staunton and Dan Rivers, but there was an extra bonns for wild turkey hunters. The Game Commission held its second experimental spring gobbler season.

Hunting gobblers during the spring of the year is a sport that can be traced back to Indian times. It has been popular in a number of the southeastern states for many years. Arkansas, Lonisiana. Mississippi and Tennessee have spring gobbler seasons only, while North Carolina hunters have a fall and winter gobbler season. Some, like Florida and Georgia, have spring gobbler seasons and fall "either sex" seasons, while others, Alabama and Sonth Carolina, have "gobbler only" seasons in the spring and fall,

The hunting of gobblers in the spring has proven to be a popular and exciting sport in the neighboring states. It is hailed as a quality sport requiring great skill for success. To fulfill one of the objectives of the Game Commission, that of providing maximum lunting recreation and opportunity consistent with good game management principles, it was natural that an experimental spring season be held to investigate its possibilities.

Mr. Gwynn is a game research biologist with the Commission stationed in Charlottesville; Mr. Shaffer, supervising game biologist in Lynchburg.

Thus, from April 24 through April 29, 1961, a segment of Virginia's sportsmen ventured forth to test the spring hunting season. This experiment was made on the military areas of Camp Pickett and Camp A. P. Hill and on the Commissioned-owned Gathright Wildlife Management Area. The results were 34 gobblers collected during 1,446 hunter mornings of effort, an average of one gobbler for every 42 mornings of hunting.

Following this first gobbler season, the following conclusions were reached: (1) The hunters that tried it were largely enthusiastic about it; (2) Not a single hunter observed a turkey nest; (3) Spring gobblers were larger and just as good to eat as the fall birds; (4) Many hens were observed by the hunters; (5) Hunter pressure would not be the problem which had been anticipated; (6) Gobbler hunting requires much practice and skill.

This first test did not answer all the questions, however. Experience and detailed observations were needed on the effects of a spring hunting season upon laying and nesting success of the turkey. In addition it seemed imperative to compare results of a spring season on easily enforced areas like Gathright or Camp Pickett with those obtained during a similar season in areas where private land predominated.

To answer these questions and in response to the enthusiastic acceptance by participating sportsmen, the Commission voted to continue the experiment from April 23 through 28, 1962. Legal hunting areas were extended to include Amelia, Chesterfield, Nottoway and Powhatan counties, areas of predominantly private ownership. Commissionowned lands of Goshen in Rockbridge County; Little North Mountain in Augusta County; Camp Peary, Ft. Eustis, Naval Weapons Station and Cheatham Annex in York County were also included in the 1962 trials. Restrictions limiting hunter numbers on A. P. Hill and Camp Pickett were rescinded because hunter pressures did not develop in 1961 as expected. The 1962 regulations specified that bearded turkeys only could be hunted from one-half hour before sunrise until 10:00 a.m. each morning during the six-day season. Hunters were allowed to hunt till noon during the 1961 experiments.

Most hunters were interviewed daily by game biologists at check stations on the military areas and Commission-owned lands. The interview consisted of questions concerned with their morning's experiences and success. Sportsmen hunting on private lands in Amelia, Chesterfield, Nottoway and Powbatan were given postcard questionnaires by game wardens. Hunters were required to check their gobblers through the regular big-game checking stations. Finally, all successful hunters were mailed questionnaires designed to obtain pertinent information on hunting methods, experiences and attitudes. A 77 percent return was obtained.

Spring gobbler hunters harvested 128 gobblers and one bearded hen in 1962. An estimated 1.075 sportsmen hunted approximately 2.685 mornings for an average 13 percent success. (This data is based on the assumption that each spring lumter lumted two to three days.) The result by county follows:

Alleghany-1	Chesterfield—17
Amelia—39	Dinwiddie-12
Augusta—0	Nottoway 25
Bathk	Powhatan—21
Brmswick—2	Rockbridge- 1
Caroline—1	York = 0

The counties of Amelia, Chesterfield, Nottoway and Powhatan were open fully to hunting; only sections of the other counties were open.

For those interested in statistics, here are some figures:

Chart I
Daily Hunting Pressure and Gobbler Kill (All Areas)

•		
DATE	HUNTER MORNINGS	TOTAL KILL
April 23 (Mon.)	732	24
April 24 (Tues.)	399	22
April 25 (Wed.)	387	23
April 26 (Thurs.)	326	19
April 27 (Fri.)	359	22
April 28 (Sat.)	_482_	19
Totals	2,685	129

Chart II

Area Hunting Pressure and Gobbler Kill

	1961	1962	1961	1962
AREA	HUNTER	MORNINGS	TOTAL	KILL
A. P. Hill	515	419	5	4
Camp Pickett	471	444	24	22
Gathright	460	228	5	5
Amelia, Chest'field,				
Noti'way, Powh'an	_	1,408	_	94
Goshen		99	-	4
Little North Mountair	· —	67	_	0
Cheatham Annex		20		0
Totals	1,446	2,685	34	129

Some interesting facts were discovered by analyzing the results of the spring hunt. One bearded hen was shot during the season along with 118 adult gobblers and 10 young gobblers (which are less than a year old at the time of the spring season). The adult gobblers averaged 18½ pounds and their beards averaged 9¾ inches. There were 26 gobblers weighing 20 pounds and over. The heaviest gobbler recorded was 24 pounds and the longest beard was 12½ inches. There were six toms with 12-inch beards. The young or juvenile gobblers averaged 13 pounds and were sporting an average 4½-inch beard. The bearded hen weighed 10½ pounds and had an 8½-inch beard. Collectively, over a ton of adult gobblers (2185 pounds) were killed during the week.

Seventy-seven percent, or 89, of the successful spring gobbler hunters replied to the questionnaire sent them. Nine-ty-nine percent of the gobblers were bagged between 5:00 a.m. and 8:00 a.m. one bird at 8:30. On whether or not spring gobblers provided as good eating as fall and winter turkeys the hunters replied as follows: 15 no. 43 yes and 10 stated that they tasted better. Seven hunters still had their



The night before the season opens, eager hunters "rehearse" on all manner of turkey call devices.

birds in the deep freeze while nine either hadn't eaten their birds or had given them to friends.

The most frequently used type of turkey caller was the box and/or slate variety (43 percent of the 87 successful hunters used these); 29 percent used bone type callers; 25 percent used the mouth type yelpers. One hunter used his pipe and three said they used no caller. One hunter caught his bird; obviously he was either a track star or the gobbler was crippled.

The most popular shotgun and shot size was found to be a 12-gauge shotgun with number 4's. The next most popular combination was the 12 gauge with number 6 shot. Eightynine percent of the successful hunters used a 12-gauge gun. One 10 gauge, one 20 gauge and four 16 gauge shotguns were reported by the 88 hunters replying to the question.

Space left for "additional comments or remarks regarding the 1962 spring season" was unused by 19 of the 89 hunters returning the questionnaire. Twenty-three wanted the season to continue and 10 more wanted it to be expanded to more counties. One hunter requested additional days; another wanted to hunt longer each day (till noon). Various other remarks included: Winter hunting is more sporting—3 hunters; spring hunting is more sporting—3 hunters; spring hunting is more sporting—3 hunters; eliminate or shorten fall season—4 hunters; find some way to curb the large number of dogs roaming through the woods in the spring—6 hunters; the season opening dates are too early—2 hunters.

Other comments: "exciting," "good idea," "best turkey hunting," "very good season," "high class sport," "looks good but not sure yet," "very good where gobblers are too plentiful." "foxes and hawks kill all the turkeys." One thoughtful hunter volunteered, "too soon to tell the results of this experiment."

From direct observations made on the open hunting areas during the week of the gobbler season the following conclusions can be reached:

1. Nest Disturbance: With a total of 2,685 hunter-mornings recorded on all areas, only two nests were reported seen. These nests on Cheatham Annex and Gathright each contained 13 eggs. In a study by Allen in Alabama, 102 experienced turkey hunters with a combined average of 21.9 years of turkey hunting experience reported only 10 known occasions in which hens were flushed from their nests during spring hunts. This is an average of one flush for each 223.8 years of hunting; to date in Virginia the average is even lower.

From the above data collected in Virginia and Alabama it doesn't appear that nest disturbance is a valid objection to spring gobbler hunting. Those who have hunted these birds for the first time in the spring realize that, in concentrating on one particular gobbler, one does not stir around too much. Permitting hunting only during the early part of the day also eliminates the possibilities of hen kills and nest disturbances.

During the spring of 1961, 24 gobblers were bagged on Camp Pickett. During the hunt and throughout the summer this camp was an intensive training area for the National Guard. Thousands of soldiers, many with tanks, were on maneuvers constantly during the incubation season for the wild turkey hens. In spite of the spring gobbler season and the intensive troop training on the area there were nine more gangs of young turkeys recorded than were present the previous fall.

2. Hunting Pressure: It will be noted from Charts I and II (Continued on page 20).

SEPTEMBER, 1962

Fitting Out Your Outboard For Fun And Safety

(Part III)

Text and Photo by JIM RUTHERFOORD Radford, Virginia

YOUR craft is only as safe as you, the "skipper," and your "crew" make her. It is up to you and your family to learn all you can about the fine art of boating and seamanship before you take to the water and to continue your study as you gain in experience on the water.

The customer relations departments of many boat and motor manufacturers offer, free of charge, much easy-to-read literature on small boat handling and boating skills. Many such companies offer publications in comic-book style, especially for the younger members of your "crew." The children will find these both interesting and informative, and before long you will find that boating and boat handling are the core of much of your conversation afloat.

This is the time for the family to learn, together, the art and the etiquette of boating. You will find other boatmen always eager to help you with any boating problem.

Many enthusiastic boaters have joined together to form their own boating clubs which are devoted to greater safety and greater boating enjoyment. Some of these are national organizations such as the U. S. Power Squadrons and the U. S. Coast Guard Auxiliary.

The Auxiliary is a civilian, non-military, voluntary organization of owners of boats, airplanes and radio stations administered by the U. S. Coast Guard. It was born in the war-troubled year of 1939, at which time it was called the U. S. Coast Guard Reserve. In February 1941, Congress formed a new U. S. Coast Guard Reserve, patterned after the Navy Reserve, and renamed the original Reserve the Coast Guard Auxiliary. At this time many members of the Auxiliary transferred to the regular Coast Guard or to the new Reserve where they served with distinction in all the war zones of the world. Those individuals unable to participate in front-line duty became members of the Temporary Reserve on a voluntary, part-time basis and helped on the home front.

The Auxiliary gained rapid momentum in its activities at the war's end, and each postwar year has brought the Auxiliary nearer to its goal—to be the outstanding boating group in the United States. The mission of the Auxiliary is to promote safety in the small-boat field.

Membership in the Auxiliary is open to any male or female citizen of the United States over 17 years of age who has either a 25 per cent interest in a boat, airplane or radio (amateur) station or special nantical training or experience. A boat upon which Auxiliary membership is based may be either a pleasure or commercial motorboat of Class A. 1, 2 or 3; a pleasure sailboat over 16 feet in length; or a pleasure motor vessel (not steam) over 65 feet in length. The "average" motorboat described in this series, the Class I vessel of about 17 feet in length is the backbone of the Auxiliary's inland activities. Therefore we might say that membership in the Auxiliary is open to any

average outboard boatman in the United States.

The basic unit of the U. S. Coast Guard Auxiliary is the flotilla. Guided by its elected officers, a flotilla commander, vice-commander and training officer, the flotilla consists of a minimum of 10 member boats. Five or more flotillas are grouped into a division. The divisions, in turn, are organized geographically into districts, the boundaries of which coincide with the boundaries of Coast Guard Districts, Virginia divisions, for example, are grouped under the 5th U. S. Coast Guard District with headquarters at Hampton, Virginia.

While there are active Auxiliary flotillas in tidewater Virginia, including flotilla #51 in the Richmond area, the newest flotilla to be organized is #93 with headquarters in Roanoke. This group now has more than 60 provisional and regular members with new provisional members becoming associated at nearly every meeting.

All provisional (beginning) Auxiliary members must, within one year of the time of joining, complete satisfactorily the prescribed training courses: history of the Coast Guard, seamanship, piloting. communications, first aid, and internal combustion engines. In addition, the member must demonstrate certain elementary knowledge of artificial respiration, rope handling and small boat handling and complete a piloting problem by use of a chart and simple piloting tools. Regular training sessions are held by the flotilla to assist the member in this work. The courses are quite elementary in nature, and the average boatman experiences little difficulty in their satisfactory completion. The boatman does, however, gain much in his over-all boating knowledge and develops a sense of responsibility toward his boat and crew as well as his obligations to other boatmen.

When accepted for regular membership in the Auxiliary, the member is authorized, but not required, to wear a uniform and descriptive insignia. Also with regular membership comes the privilege of voting, holding office in the organization, and flying the Auxiliary flag on one's boat.

All of the Auxiliary's activities are aimed toward the promotion of boating safety. In all the districts various Auxiliary units sponsor standard instruction courses in boating subjects for the benefit of the general public. Each year thousands of boats are given courtesy examination checks by Auxiliary examiners qualified in that field, and if they measure up to the high standards set by the Auxiliary, they are awarded the coveted Auxiliary Examination Decalcomania. Auxiliary vessel facilities themselves are also inspected annually by qualified members and, if they qualify, are awarded the Auxiliary Facility Inspection decal.

Auxiliarists are also given the opportunity to assist the Coast Gnard with some of its civil functions, particularly those concerned with the safety of navigation. Hundreds of regattas are patrolled each year by Auxiliary units and Anxiliarists assist the Coast Guard in locating and lending a helping hand to many of their fellow boatmen in distress.

Thus it is that Auxiliary members, by friendly advice, good example, and by furthering boating education and instruction, form a link between official enforcement by the Coast Guard and state authorities and voluntary compliance by the boatman.

It might be well to mention here that at no time are Auxiliarists granted law enforcement authority. If a private boat fails to pass the Auxiliary courtesy inspection, the boat owner is informed of the discrepancies and made aware of the legal requirements but no report is made to any agency nor is any record of the inspection kept. Nor may any



Group picnics and outings are a part of the social life of U. S. Coast Guard Auxiliary members. Here some members of Flotilla #93, Roanoke area, enjoy lunch in a cove on Claytor Lake.

Auxiliarist ask to perform such an inspection. Courtesy inspections are performed at the request of the boat owner only. The Auxiliary unit may publicly announce their availability at given locations for the purpose of performing such examinations upon request. For example: Flotilla #93, Roanoke, plans to set up a regular weekend schedule for courtesy examinations on both Philpott Reservoir and Claytor Lake so that boatmen will be aware that the service is available. Times and locations will be announced via newspapers and radio and television stations.

In addition to the organized work and duties of Auxiliary members there is a considerable social aspect which makes membership doubly enjoyable. The Auxiliary is not an all work and no play organization. Members join in picnics, cookouts, cruises, camping trips and other seasonal activities as well as dances, dinner parties and bowling parties during the winter months. Many worthwhile friendships are cemented through Auxiliary activity. You, as a beginning or a veteran boatman, will find Auxiliary membership fully worth your while.

The reader may wonder why we have devoted so much space to the regulations of the U. S. Coast Guard and the activities of the USCGA when Virginia has her own boating laws governing the numbering, equipping and operation of boats on the public waters of the state. The answer is that all of the major boating waters of the Old Dominion, Philpott, Claytor, Kerr, South Holston, are under the joint jurisdiction of the state authorities and the Coast Guard. The new Smith Mountain impoundments of the Appalachian Electric Power Company will also be under this "double enforcement" and several major rivers are, of course, in the same category for at least part of their length, as well as certain "marginal" sea areas adjacent to the shores of the state.

Even on our far inland lakes, such as Claytor and Philpott, boaters last season were surprised to encounter Coast Guard boarding teams operating in conjunction with the state game wardens who have the assignment of enforcing the Virginia Boating Law.

While the Virginia Boating Law closely parallels the regulations of the Federal Boating Act, there are a few differences. The boater is advised to seek advice from his local game warden, the Coast Guard Auxiliary or the regular Coast Guard as to how these differences may apply. You will find the personnel of any of the three agencies courteous and willing to help with any boating problem.

The U. S. Coast Guard Auxiliary members have no law enforcement authority but are more than willing to advise

Class I Outboard Motorboat Checklist

Class I Carsoula	TIROCOL DI	out Click	
	Virginia	Coast	C. G. Aux.
	Required	Guard	Required
		Required	
Correct Numbers	R	R	R
Horn or whistle	R	R	R
Life saving devices*	R	R	R
(Cushions, vests etc.)			
Fire extinguisher*	R	R	R
Anchor light	R	R	R
	(If Anch.	(If Anch.	
	at night)	at night)	
Running lights	(If Oper.	(If Oper.	R
	at night)	at night)	
Fused circuits	D	Ď	R
Spare lamps and fuses	D	D	D
Spare dry battery	D	D	D
Ventilated bilges &	R	R	R
compartments			
Vented fuel tanks, if fixed	R	R	R
Correct fillers and shut-off	R	R	R
valves; fixed tanks			
Electrical grounding of	R	R	R
fixed fuel tanks			
Securing of fixed or portable	e D	D	R
fuel tanks			
Bailer or hand pump	Ð	D	D
White emergency light	D	D	D
Distress flares	D	D	D
Anchors and Line	D	D	D
Boat hook	D	D	D
First Aid Kit	D	D	D
Batt, box w/cover	D	D	D
Emergency fuel	D	D	D
Fenders	D	D	D

R: Required by law or for awarding of USCGA decal.

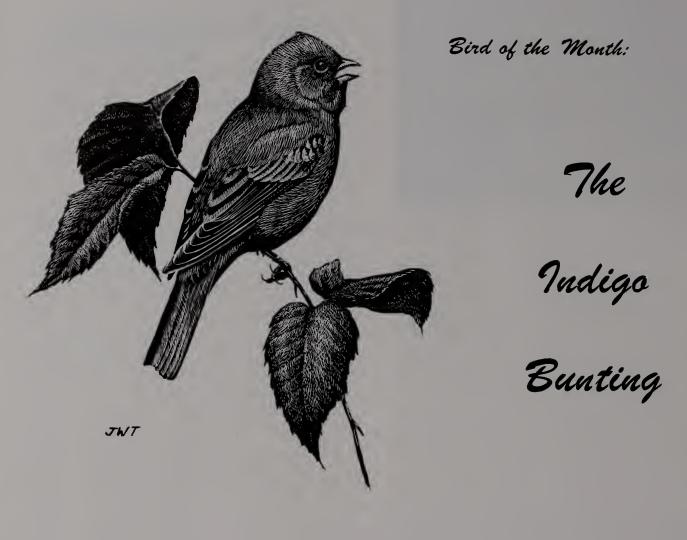
you in fitting out and equipping your boat to prevent your running "afoul" of the "law." Ask them, when in doubt

A most important point to remember is that any craft that has been awarded a valid courtesy inspection decalcomania is not subject to equipment inspection by either the Coast Guard or by the state enforcement personnel. The USCGA decal indicates that your craft is equipped considerably above the legal requirements of either federal or state regulation and that your craft has been found safe and seaworthy at the time of examination. Have your boat examined annually by the Auxiliary. It can mean a lot to you to know that your boat is in proper condition, and it can mean a lot to your law enforcement agencies by eliminating unnecessary inspections and saving time which may be better devoted to other boating safety duties.

A checklist of the requirements of the state, the Coast Guard and the Auxiliary is shown above. If your craft can qualify for the Auxiliary decal, you need never worry about discrepancies that may be found by the other two.

D: Desirable equipment, not required by law.

^{*} Must be of U. S. Coast Guard Approved type bearing approved label in legible condition. All such devices must be in good, serviceable condition. See Virginia Motorboat Owners Guide for details on proper numbering.



By DR. J. J. MURRAY Lexington, Virginia

HAT this little bird, so highly colored and so common, should nevertheless be so little known is an indication that most people do not really notice the things they see. The indigo bunting is abundant all over Virginia, from salt water to the top of Mt. Rogers, yet I rarely show a collection of birds skins to an audience without having someone ask, "What is that beautiful little bird?" They will scarcely believe that it is common everywhere. This is the more strange since the chosen habitat of the bird is the roadside hedge. One cannot drive many miles along a country road in summer without seeing one fly across the road in front of the car. In fact, it is one of the more frequently killed species along our local highways.

The name, indigo bunting, describes the plumage of the male. He is blue all over, with more green in the shade than the bluebird's color shows. The blue is deeper on the head, while there is some admixture of black in wings and tail. The female is quite different. She does have a tinge of blue in the large wing feathers, but in general is gray-ish-brown, somewhat paler below.

The male is an inveterate singer. All through the hot summer days he repeats from a high perch, preferably a dead branch near the top of a tree, his brilliant and complicated little song. It sounds to me as if he were rapidly going through the declension of a number of Latin pronouns.

Oddly enough, this bird that needs a high perch for his singing seeks out a low spot for his nesting. In a crotch in a bush or tied to briers in a blackberry patch, its small nest is neatly fashioned of fine grass and rootlets and hair. The height from the ground will vary from two to seven feet, according to the type of vegetation in which it is placed.

In western Virginia eggs are found from May 25 to August 2 This would indicate at least two broads for many pairs. The eggs are very pale bluish in color. Three or four eggs make up the normal numbers. Around the nest the indigo buntings are very much on the alert, calling out a sharp alarm note, "dzzt." when an intruder approaches, in this effort to warn off intruders the male is quite as solicitous as the female.

Cowbirds, which always place their eggs in the nests of other birds and leave the unwitting foster parents to care for their young, seem to favor these little birds for their imposition. The female cowbird will place one or even two of its slightly larger eggs in the indigo bunting's clutch, often throwing out a corresponding number of the bunting's eggs so as to keep the normal number in the nest. The cowbird's egg will hatch first, ensuring a disproportionate share of food for the parasite and finally starving the host's own young or even pushing them out of the nest to die on the ground.

VIRGINIA WILDLIFE

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- VIRGINIA SELECTS SPLIT DOVE SEASON. A split dove season totalling 70 half days was selected by the Virginia Game Commission at a public meeting in Richmond July 20. The first period begins at noon, September 15, and continues through November 3. The second period will be December 17 through January 5. Dove shooting is permitted from 12 o'clock noon until sunset each day, with bag limits set at 12 daily and 24 in possession. The split season was chosen to give hunters a chance at migrating birds which pass through Virginia in late December.
- Rail and gallinule season was set to open September 13 and close November 21, a period which coincides with the most favorable tides for this type of hunting. Bag limits will be 15 clapper rails and gallinules a day, 30 in possession, and 25 sora rails daily or in possession.
- Snipe and woodcock seasons were set to open on November 19 when the regular small game season will be open. Snipe season will continue through December 18 and woodcock hunting will end on December 28. Bag limits on snipe will be eight daily and eight in possession. Woodcock hunters will be allowed four per day and eight in possession. Shooting hours on rails, gallinules, snipes, and woodcock are sunrise until sunset.
- HIGH INTEREST SHOWN IN GAME WARDEN JOBS. A total of 759 applications were received for Game Warden Trainee positions with the Commission of Game and Inland Fisheries prior to the June 22 deadline, according to John H. McLaughlin, Game Commission Staff Assistant. The openings were advertised throughout the state and applications were received from nearly every county. Only 499 of those who applied met the rigid qualifications and were tested. Many were disqualified for falling outside the 21-34 year old age bracket or for lack of the required high school diploma.
- The test, which included sections on ability and aptitude, personality adjustment, and background knowledge of conservation, was prepared in cooperation with the Merit System Council of the Virginia Department of Personnel. The Virginia Employment Commission handled applications and administered the examinations in their 35 testing centers in various parts of the state.
- Oral interviews have been held with 91 applicants who made satisfactory grades on the written examinations. Of these, approximately 20 will be chosen for appointment as Game Warden Trainees at this time. The oral interview board consisted of three Game Commission representatives, plus Dr. Burd McGinnes, leader of the Cooperative Wildlife Research Unit at Blacksburg, and W. R. Lawrence, supervisor of the Merit System Council of the Virginia Department of Personnel.
- The trainees will be given a two-week course of instruction at the University of Richmond August 27 through September 7. They will then be assigned to work with regular Game Wardens on an apprentice basis for at least six months.
- ERRORS FOUND IN HUNTING DIGEST. Some typographical errors have been found in this year's "Summary of Virginia Game Laws." An incorrect opening date is given for the statewide bear season which opens Monday, November 19, instead of November 20 as specified in the digest, and western Amherst County will have the six-day "west of the Blue Ridge" deer season instead of the longer one listed in the publication. The legal deer season dates for Amherst County west of U.S. Route 29 will be November 19-24. The bag limit will remain one deer per season, with doe shooting allowed on the first day as specified in the digest. The Nelson County squirrel season is in two portions: The first extends from October 1 through 15, the second from November 19 through January 31. The game law summary lists each of these seasons as applying to half of the county; both seasons apply to the entire county.

SEPTEMBER, 1962 13

VIRGINIA HUNTING

A simplified presentation of Virginia's more important hunting seasons. For

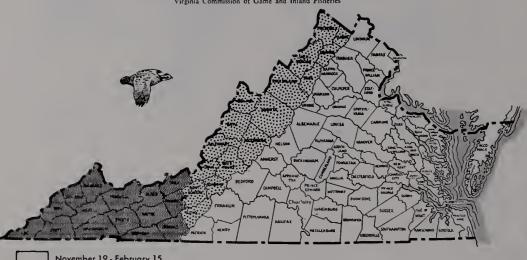
LICENSES

County or city resident to hunt & fish in county or city of residence.	\$ 2.00
State resident to hunt statewide	3.50
Nonresident to hunt statewide	15.75
State resident big game license to hunt bear, dear & turkey statewide,	
required in addition to county or state hunting license	1.00
Nonresident big game license	5.00

1962-63 Quail Seasons and Limits

Deer of either sex, bear and squirrels prohibited) in counties having an ope with bag limits corresponding to the involved during the general season.

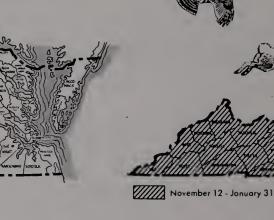
1962-63 Rabbit and (



November 19 - February 15

November 12 - December 31

November 12 - Jonuory 31



Navember 19 - Jonuory 31

1962-63 Bear Seasons and Limits



November 5 - Jonuary 5

November 10 - Jonuary 5

Bag Limit: One Per Seoson (over 75 pounds live Weight)

Bog Limits: 8 Per Doy, 125 Per Seoson



November 12 - January 15 Two per seoson: either sex

November 19 - Jonuary 15 Two per seoson: either sex

CLOSED

ASONS AT A GLANCE

detail, consult a copy of the Summary of Virginia Game Laws, 1962-63 Season.

ASON

taken with bow and arrow only (dogs on deer from October 15-November 1 of animals specified for the counties

HUNTING HOURS

Nonmigratory birds and game animals may be hunted from one-half hour before sunrise to one-half hour after sunset.

In Virginia, no one is allowed to-

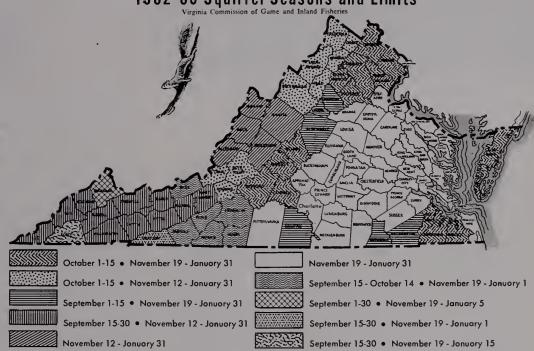
- · hunt QUAIL in the snow,
- · hunt with firearms or other weapon on Sunday,
- shoot any wild bird or animal from any vehicle.

Seasons and Limits



Robbits: 6 Per Doy, 75 Per Season Grouse: 3 Per Doy, 15 Per Seoson

1962-63 Squirrel Seasons and Limits



Bag Limit: 6 Per Doy, 75 Per Seasan

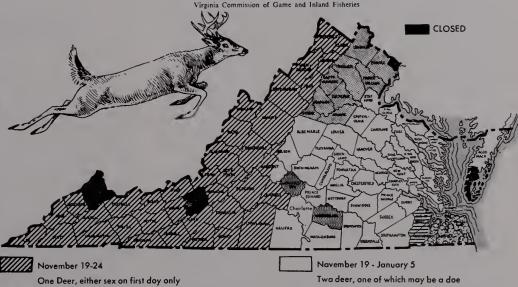
ons and Limits



ovember 19 - January 31 wo per seoson: gobblers only

ovember 19 - January 15

1962-63 Deer Seasons and Limits



November 19-24

November 19 - Jonuary 5

November 19 - Jonuory 5 Two Deer: Bucks anly

One deer: either sex

November 10 - Jonuory 5 Two deer, one of which may be o doe

October 1 - November 30

Two deer, one of which moy be o doe



Commission Photos by Kesteloo "Someday I will figure out the little gray darters and then all will be wonderful."

By H. LEA LAWRENCE Johnson City, Tennessee

REALLY shouldn't start talking about dove hunting—my doctor warned me too much excitement wasn't good for my blood pressure—but now that I've begun, I might as well get it off my chest.

Maybe I should cuss the little critters first; then I could sort of plane off and say what complimentary things I can think of later. The trouble with doves, though, is that the good things and the bad things about them get mixed up when you talk about them. So I guess I'll just let my tale unfold as best it can, allowing the cards to fall where they may.

Don't get me wrong. I don't actually have anything against doves as game birds: it's just what they do to me that causes me to feel as I do about them.

Take missing them, for example, I get the idea, at times, that I must hold the unofficial world's record in this category, and I could fill a couple of pages with reasons why it has happened to me so often. In fact, I have gone far beyond the garden variety of excuses one encounters on every dove shoot. Things like sun-in-the-eyes, poorly-fitting gamstock and tricky crosswinds are old hat to me!

I have graduated to among the elite among excuse-makers. Once, I recall, I explained that a farmer's cow had nudged me in the back just as I pulled the trigger, resulting in a terrible miss. In turn, this experience so unnerved me that my shooting was off the rest of the afternoon.

Another time I had a box of shells which were old, and which kept misfiring, causing me all manner of mental strains that ruined my day. Still another time a sprained ankle kept me from getting a proper stance as I stood to shoot. All these and many, many more are in my repertoire of alibis.

I resent the fact, also, that doves refuse to adopt any standard speed so that I can get my lead down pat, I have thought on several occasions that I had managed to do this, and the musually good averages I came up with as a result had me puffed up like a toad. Ordinarily, though, on the very next trip the birds were geared differently, flying faster than jet planes and darting around more. And, pfffft! My

16

ego was deflated like a balloon alighting on a cactus plant!

Even the good averages, when they occur, are rough on a hunter. I remember an opening day a few years ago when I ran a phenomenal number of doves without missing. I wasn't aware of what I had done, in fact, until I stopped to count birds after a fast flurry of shooting. Upon examination I found I had nine birds for nine shots, and just one more bird would fill my limit. And killing the next bird would make a perfect average.

Do you think I did it? You're crazy if you suppose so! I tightened up on the next shot like a man ascending the steps to the gallows and missed the bird so far it didn't even bother to flare. And I missed the next bird just as far, and the next and the next. Six shots later I finally winged a bird which was flying right down my gun barrel, a bird which I could have batted down and done the job about as efficiently.

I have a rule of thumb which I have learned to apply while dove shooting. It goes like this: "A bad start makes for a bad ending; a good start makes for a bad ending." Only once in a great while does this rule fail to hold true.

Perhaps I should have stuck with the method I used when I was a young boy. This was before anyone had ever taught me even the rudiments of wing shooting—as a matter of fact, I didn't realize there was any point in shooting at flying objects—so I used to sneak up and bushwhack doves sitting in trees, on telephone lines or feeding on the ground. I though it was great sport and pretty challenging, especially since the single shot .410 I used didn't toss out much lead.

Even when I began wing shooting I didn't have it so bad. I missed a lot and I assumed this was what was supposed to happen. It was when I suddenly began to worry about missing that my trouble arose. I have been a harried man ever since!

Naturally. I am addicted to dove hunting. Like people who want to climb mountains that are supposed to be unclimbable, I feel that someday I will figure out the little gray darters and then all will be wonderful. I also tell myself that the dove is a fine bird on which to sharpen my shooting eye for other birds I hunt. My logic follows something like this: "If I shoot at doves I will encounter all the angles, speeds and acrobatics any other game birds will offer. Then I will possibly miss these other birds less often than I am missing doves." This is a kind of left-handed consolation.

There are other consolations, though, and they lie in the good points about doves which I mentioned previously.

It is generally accepted, especially among dove hunters, that the monrning dove is about as tough a target as can be found anywhere. They are fast, small birds which are capable of some of the darndest aerial maneuvers imaginable, and thus are able to confound even the best of wing shooters. Two of my hunting companions are champion skeet shooters and, in addition, seasoned upland game bird lumters. Yet 1 have seen them have 'off days' which caused them to turn a deep shade of purple in the face before they managed to come up with a limit. One of them even was able to shoot more poorly that I did one day, and I have secretly gloated over it ever since. Well, to be frank, I have even publicly gloated over it a time or two.

The fact that doves are immerous and able to withstand heavy shooting pressure is another good point. While other game birds decline in numbers, or show signs of declining, the dove population remains fairly stable, and, in some years, has even shown an upward trend, Locating a



Dove hunters need little in the way of equipment: a small folding stool, a semblance of a blind or hiding place, dark clothing, a shotgun . . . and plenty of shells.

dove shoot is a lot simpler than, say, finding a covey of quail or working a mountainside for grouse. I do both of these things, too, but in terms of actual shooting, the dove far, far outweighs both of them put together. Doves provide a tremendous amount of sport for a growing army of hunters, and its popularity as a game bird has soared during the past decade.

As a table bird, the dove is hard to surpass. Whether they be baked, stewed, fried or broiled, the succulent meat is a treat to make a man's mouth water at the very thought. I have begun charcoal broiling doves recently and discovered that they are delightful fixed this way, too. As much as I love hunting doves, I sometimes believe that I enjoy eating them equally as much. And as I have illustrated, eating them is far less frustrating than hunting them!

That idea even opens up the possibility for another good excuse. I can say that I don't really care anything about shooting doves—I just hunt them because they are such fine eating birds.

Just wait until I try that one!

DOVE HUNTING

By GEORGE McKENNA Richmond, Virginia

HE TRADITIONAL way to hunt doves in Virginia is with a big shoot in which twenty or more hunters surround a large grain field and try to take the birds as they come in to feed. This is by far the best way to hunt them here. They will come in to a good feeding field by the hundreds, in flights of anywhere from two or three birds up to several dozen, and from several different directions. If there are enough hunters on stands around the edge of the field the constant shooting will keep the flights stirring around, and will give everyone a fair chance to bag his limit.

A field where corn has recently been harvested by a combine is probably the best site that can be found for one of these big shoots. Combines usually leave a lot of shattered grain on the ground. The doves are aware of this. and fly in to feed on it.

Soybeans that have just been combined often rank a close second to harvested corn, and a field freshly seeded

to small grains is also usually good because modern high speed grain drills don't cover all the seed. This is something else that doves have learned, and they remember it when they are hungry.

A field of corn that is ripe but not yet harvested can give fairly good shooting at times, but one that has been cut for ensilage usually offers poor hunting. Corn is cut for the silo before it is ripe, and practically no shattered grain is left behind when it is harvested in this way.

Hunters who intend to shoot over one of these grain fields need very little in the way of equipment. A small folding stool can come in handy to sit on while waiting for the birds, but elaborate blinds aren't needed, and camouflage clothing is unnecessary. It is a good idea to find a hiding place behind a hedgerow or clump of bushes if one is available, but I have had doves fly right over me while I stayed on one knee out in the open. A white shirt, or a white handkerchief waved while they come in, will frighten them away. But they seldom shy away from the hunter dressed in brown or dark green or dark grey, or even khaki, as long as he remains motionless.

The best gun to use on one of these big shoots is a fairly heavy 12 gauge with either a modified or full choke barrel, and the best load is the one with the equivalent of $3\frac{1}{4}$ drams of powder and $1\frac{1}{4}$ ounces of number 8 shot. Either heavy field loads or high velocity loads can be used in the 16 and 20 gauge guns, with number 8 shot still the most effective. The full choke barrel usually gives best results in the 20, and either full or modified in the 16.

The first thing the hunter will notice about this kind of dove shooting is that the birds fly fast, and can change the direction of their flight abruptly when they become alarmed. But doves are small, steamlined birds that don't fly quite as fast as they appear to, and probably more of them are missed through giving them too much lead than because they aren't led enough.

Another important reason for missing doves, and for wounding birds that are lost to die later, is that too many hunters try to make shots that are out of range for their guns. It is much too common for hunters to shoot at birds that are only black silhouettes against the sky. Not even a full choked 12 gauge gun loaded with magnums will make consistent kills at such distances, and the occasional lucky shot that puts one or two pellets into a vital spot and knocks a bird down makes the problem worse. It leads the overly optimistic hunter to believe that his gun can regularly kill doves at long range, and he tries every such shot he is offered. The result is that several birds are wounded for every one that is killed.

It is much better to let the birds go when they are out at the edge of the shotgun's range, and to shoot only at birds close enough so the grey coloring can be distinguished. This will mean more birds for less shells, and far fewer cripples to be wasted.

As a rule, at least 10 or 20 hunters are needed for a successful shot over a feeding field. It there aren't enough guns to keep the flights stirring around they seem to concentrate in the part of the field that is out of reach of the hunters. A small party of hunters will usually do better if they try to walk up the doves, moving across the field in a long line and shooting the birds as they flush out of the grain. This won't work very well in a field of standing corn, because when the doves are flushed there they are likely to

SEPTEMBER, 1962

escape by skimming over the tops of the corn plants, out of sight of the hunters almost as soon as they take to the air.

I have had some success walking up doves along the edges of corn fields where raccoons have come in from the nearby woods to get a few free meals. Raccoons, and sometimes squirrels, will rip the ears off the stalks and scatter grain which attracts doves.

When doves are flushed at the edge of a cornfield they sometimes rise and fly into a nearby woods, giving the hunter good crossing shots. They don't always do this, however. Sometimes they wheel sharply the instant they are clear of the corn and fly away just above the tops of the plants, making all but a quick snap shot impossible.

An improved cylinder 12 gauge gun can be used for this type of dove hunting. It has to be light and fast handling, to make the shots quickly, but the same load of number 8 shot that takes doves from a stand will prove effective. The full choke gun won't work as well for this kind of hunting as it will when shooting from a stand, and even in a 20 gauge nothing tighter than a modified choke barrel should be used.

The one type of dove hunting that works well in some other states, but has never worked well for me in Virginia, is waiting for them at water holes. I think there are so many creeks and farm ponds here that our doves don't have to concentrate in any one spot to find water. The hunter who is out alone, or with one or two companions, will probably do much better if he tries to walk the birds up at the edge of a feeding field.

The best time of day for a dove hunt seems to depend upon the weather. If it is warm, as it often is in Virginia





The more dove hunters around a field, the better the hunting; more shocters keep the dove flights stirring around. At right, Game Commission Chairman T. D. Watkins, an avid dove hunter, retrieves a downed bird.

early in the season, the birds stay in their loafing areas in the woods until late in the afternoon before feeding. In hot weather the last hour of the day often gives very good shooting even though the first part of the afternoon was dull. But in cool weather the birds feed earlier, and shooting can be good from noon until almost dark.

And for the hunter who is curious about the birds he shoots, it is easy to distinguish between young doves and adults. Many of the feathers on young birds are tipped with buff, while those on the adults are solid grey.

Hunting Marsh Birds In Virginia

By GEORGE McKENNA Richmond, Virginia

ALTHOUGH comparatively few hunters take advantage of it, the marshes in Virginia offer shooting for five different game birds, all of them members of the Rallidae, or rail family.

All of these birds have several things in common. They are migratory, and the hunting seasons and bag limits are set by Federal regulations. They all have feet shaped like those of a chicken, and leave tracks like those of a small domestic hen, but are all good swimmers. They also all have tails which resemble those of chickens, short and pointed, and usually jutting up at a sharp angle.

Of these five birds, the one which offers the most hunting opportunities here is the clapper rail. About 15 inches in length, with long thin legs and a long, slightly curved bill, it is greyish brown in color, with white patches at its throat and on the underside of its short, pointed tail. There is a loose boned, rangy look about it that is easy to recognize once it is seen, and its call is a harsh "crak-crak" that echoes over the lonely salt marshes where it lives.

The Atlantic coast of Virginia's Eastern Shore has several very good clapper marshes, with the State-owned Mockhorn Island in Northampton County one of the best, and with good guides available at such nearby towns as Oyster and Wachapreagne. More clapper shooting is available on the

Bay side of the Eastern Shore, and some very good shooting that is not taken advantage of can also be found in the salt marshes along the western shore of the Chesapeake Bay.

Generally called a "marsh hen" here, the clapper feeds to a large extent on such small marine animals as tiny crabs and snails which will be found on the surface of the marsh near the water. To get its food, it follows the edge of the water as the tide advances and recedes across the marsh, and that is where the hunter should look for it.

The traditional way to hunt clappers is from a boat poled over a marsh on the high "rail tides" which occur only a few times during a scason. These unusually high tides cover all of the marsh except a few patches of ground that still remain above the water. The clappers congregate on and near these patches of fairly dry ground. They are either flushed by the hunters who approach them in boats, or the hunters land on the high spot and walk up the birds.

Another method of clapper hinting that is quite common on the marshes in New Jersey and Delaware, and is also used successfully here at least in Gloucester County, is to hunt the marshes at low tide. The birds feed then along the tidal guts and artificial ditches where there is still water, and will flush when approached on foot. Two hunters are much better than one for this because one of them can

18 VIRGINIA WILDLIFE

take each bank of the ditch or stream being hunted, or a retriever can be trained to flush the birds as well as to recover those that are shot.

Walking up clappers can be very hot work, particularly at the beginning of the season, and the best outfit to wear is a pair of old khaki pants and worn out tennis shoes that won't be further damaged by repeated soakings in salt water. Plenty of mosquito repellent is needed too because salt marsh mosquitoes can be murderous early in the fall.

As a rule, the actual shooting of the clappers is much casier than hunting for them. They usually flush straight up out of the marsh grass to a height of three or four feet and then fly off with their feet dangling, and with a weak, fluttering motion. They do fly faster than they appear to, however, and the hunter who misses his first few shots should try giving them more lead.

They often fly for a distance of 40 to 50 yards and then either circle around the hunter or drop down into the marsh. When they drop, it is likely to be suddenly, so the hunter should make his shots as soon as possible. And when clappers come down they are much more likely to swim or run away than they are to hide in the spot where they dropped out of sight.

The sora ranks second to the clapper rail in the amount of hunting it offers in Virginia. A much smaller bird than the clapper, it is about nine inches long, and although rather plump looking it only weighs about a quarter of an pound. The short bill is yellow, the upper part is brown and the under parts grey, and, like the clapper rail, it has a white patch which shows clearly on the under side of the short, raised tail.

The sora's favorite food in the fall is wild rice, a plant which grows in fresh water marshes, and in slightly brackish marshes near the mouths of tidal rivers. This means that the wild rice marshes in Virginia, and the good sora shooting, are located along practically all of the rivers that empty into the Chesapeake.

The marshes along the lower James and Chickahominy Rivers in particular used to offer excellent sora shooting in the days when pushers were available to pole boats containing hunters through them. The birds are still there, and if permission to hunt can be obtained from the owners of the marshes they still offer good shooting.

The best way to hunt these marshes today is for two



Commission Photo by Shomon

The traditional way to hunt clapper rail is from a boat poled over a marsh on the high "rail tides" which occur only a few times a season.

hunters to take turns, one pushing the boat with a long pole while the other stands in the bow to shoot. The boat should be flat bottomed to ride steady in the water, and as a precaution against accidents only the hunter in the bow should have a loaded gun.

Practically any tide high enough to float a boat through the marsh is suitable for sora shooting. The birds are flushed by the man in the stern slapping his pole against the water at intervals. When sora come up they fly like clappers, with their legs dangling and a weak, fluttering motion. They aren't particularly hard to hit, with most of the shots being made at ranges of under 30 yards. But after they have been shot they are very hard to find in the wild rice beds and a retriever is almost a necessity.

In addition to these two birds, three others can sometimes be found in the Virginia marshes, and may be hunted. All three of them are most likely to be seen in the fresh and brackish marshes than in the salt marshes, although any marsh bird will occasionally go into a salt marsh.

The largest of these three birds is the king rail, about two inches longer than the clapper, and reddish brown in color instead of greyish brown. A smaller cousin of the clapper is the Virginia rail, about 10 inches in length, and more reddish in color than the king rail. Except for these differences in coloring and size, both of these birds resemble the clapper rail in appearance and can be readily recognized by anyone who knows what the clapper looks like.

The third marsh bird which may occasionally be seen in Virginia is the common gallinule, sometimes called the Florida gallinule. Like the sora, it is a "crake" rather than a rail although both are members of the *Rallidae* family. It has the plump appearance of the sora, and is about a foot long. It is slate grey in color, with a red patch on the front of its face, and has a short, bright red bill. A better swimmer than the other marsh birds, it holds its tail high while in the water, and feeds while swimming, tipping like some ducks to reach its food. It makes a noise like a chicken, and will sometimes be heard or seen by hunters after sora. Like the rest of these birds, it may be hunted in accordance with the Federal migratory game bird regulations.

All of these birds can be taken with any gauge shotgun from 12 to 28, with the .410 effective in the hands of an expert. The improved cylinder choke is best in the gauges from 12 to 20, with the modified choke second best in those gauges, and best in the 28. Light loads of number 8 shot will make clean kills on all of these birds, and number 9's can be used for sora. Nothing larger than $7\frac{1}{2}$'s should be used on any of them, including the clapper rail.

Although a light gun will be very handy for hunting the marshes on foot, the swing and balance of the gun are more important than the weight when hunting from a boat. The gun has to swing fairly fast to pick up the flushed birds and make the shots before they drop out of sight again.

The best shotgun for hunting any of these birds is an old one. Salt marsh hunting in particular is hard on gun steels, and will cause rust to form in a very short time. Even an old gun should be treated with a good rust preventative before it is taken into a marsh, and all guns used for this hunting should be thoroughly cleaned and oiled both inside and out as soon as possible after leaving the marsh.

I always draw clappers as soon as possible after shooting them, usually within a few minutes, and wash the body

SEPTEMBER, 1962



Commission Photo by Kesteloo The clapper rail has a rangy look, with long, thin legs and a long, slightly curved bill. It is grayish-brown with white on its throat and under its tail.

cavities with salt water from the marsh. This removes the tiny marine animals that the birds have eaten, which can ferment and give an off flavor to the meat. Sora don't have to be drawn quite so quickly. The wild rice on which they feed during the season is the same item sold in grocery stores as a luxury. And after these plump little birds have fattened on it, they make really delicious eating themselves.

Tom Turkey Test Number Two

(Continued from page 9)

that even though the total hunting pressure increased in 1962 there was a decrease on the three areas hunted during 1961 (Gathright, A. P. Hill and Pickett), Additional areas opened to legal hunting plus the fact that it usually takes a fair amount of success to maintain high hunter pressure probably account for this. Furthermore, this was a brand new sport to most Virginians and it takes a really dedicated or foolish turkey hunter to sacrifice his sleep and meals in favor of the mosquitoes, gnats and chiggers. More hunters plus more interference equal lower success ratio.

- 3. Time of Hunting Seuson: Additional data and observations indicate that a spring season should start the first week in May rather than the last week in April. This is especially true in the northern and western areas where hens were commonly observed with the gobblers. A week later the majority of the hens should be incubating and thus the gobblers would be more desperate and could be easier harvested. Naturally the odds on even seeing a turkey hen would be greatly diminished and the temptations to the hunters decreased.
- 4. Checking Out Time: As a change from the 1961 experimental season when it was legal to hunt until 12 noon, the Game Commission adopted a regulation permitting hunting until 10 a.m. The change was enacted for a number of reasons, Gobblers usually gobble little after 8:00 in the morning; thereafter, most of the hunting is from the car, which intensifies possibilities of illegal kills from the highways. The danger of forest fires is less very early in the morning when dew is on the ground; it usually gets too hot for the hunters to be tramping the bushes, anyhow. Actually the gobbler kill would not be affected much if there was an earlier closing-out time. The large majority of the kills (99 percent) were made between the hours of 5:00 and 8:00. An earlier checking-out time would permit the hunters to return to their work without taking a day's leave.
- 5. Gobbler Harvest: A question that keeps recurring in the areas where the gobbler hunting was permitted was, "Where are all these big fellows coming from? I hunted in this

20

arca all last fall and winter, and they weren't there then.' As previously noted, 118 of the 129 turkeys recorded during the season averaged over 18½ pounds. This size bird seldom is collected in the fall and winter seasons. Obviously the individual male turkey will weigh more in the spring of the year because of his mating condition. It is apparent that many of these old large birds are not being harvested in the November-December-January season. The big old gobblers are available in the winter but they are nomads who ordinarily range by themselves, very seldom call, and run like race horses at the first sign of danger.

Another question arises concerning the number of adult gobblers killed in any one area; will there be enough to breed the hens? The answer is definitely in the affirmative since one gobbler can serve as many as 20 hens. One service is sufficient for an entire clutch of eggs and, furthermore, the gobbler season is set long after the breeding season has started. In addition, in any good turkey territory there are always a number of younger gobblers, perfectly capable of breeding but for obvious reasons have not been gobbling in the established territory of a larger mature male. By the following spring the yearling gobbler of one season will have matured to full breeding stature. Frye in Florida observed that "Too many gobblers in a territory are just as useless as too many bulls in the pasture."

- 6. Gobbler Hunting a Quality Sport: It has been mentioned before that spring gobbler hunting is a quality sport that requires skill and practice obtained only through long years of experience. Incidentally, one of the successful hunters who killed a large gobbler in Amelia was 75 years young! Gobbler hunting could easily be compared with bow hunting and "fish-for-fun" in that they all require skill, all provide many thrills, and meat is not necessarily the main objective.
- 7. Experimentation: Although much can be learned by reading books and bulletins or by discussing problems with individuals from other states, it is difficult to draw any conclusions until ideas are tested and proved in the fields and forests of Virginia. Though spring gobbler hunting is still controversial among many sportsmen, the true facts and figures can only be obtained through experiments under natural conditions.
- 8. Rrcreation: Much has already been written about the thrills of spring gobbler hunting, so they won't be emphasized here. Everyone is aware of the fact that with increasing human populations and shrinking wildlife habitat continuing healthy outdoor recreation will someday become a national problem. It appears that gobbler hunting provides more hours of recreation per piece of meat than many other forms of hunting. If the spring season can be accomplished without adverse effects to the total turkey population, why shouldn't it be encouraged?

In closing, the authors would like to quote directly a letter from a successful gobbler hunter in Lexington: "I'll give the credit to my father for getting the turkey. He is blind. He called the turkey to within 40 yards and I killed him. Weight, 23 pounds."

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Shy, Secretive and Seldom Seen --

Little Whitefoot

Text and Photos by HOWARD E. UIBLE Washington, D. C.

INTERIOR OF the genus Peromyscus are among the most numerous, variable and widespread in distribution, only one form being known to extend its range into extreme northern South America. Their generic name, Peromyscus, is derived from the Greek word pera, meaning pouch and refers to their small internal cheek pouches, and mys, the Greek word for mouse. These mice are quite versatile and adapt themselves to living in many diverse types of habitats, ranging from arid deserts below sea level to the heights of mountain tops and from the rain forests of the tropics to the limit of tree growth within the Arctic Circle.

Mice of this genus are variable in size; the length of the head and body of adults ranges from four and three-fourth inches to about ten inches and the length of the tail from one and one-half inches to about eight inches, the larger forms being native to the tropical regions. The two species most ahundant in northeastern United States are the deer mouse (P. maniculatus), so named because of its speed, method of locomotion, and seasonal change of coloration which is said to correspond to that of the Virginia deer (Odocoileus), and the white-footed mouse (P. leucopus) because of its four white feet, but nevertheless these two species are so similar in size, structure and coloration that they are difficult even for experts to distinguish and both species are popularly known as white-footed mice. These mice are medium-sized, with a head and body length of about 43/4 inches to about seven inches and a tail length of about 13/4 inches to about four inches. Adults weigh between 15 and 35 grams, and are full grown at about six months of age.

White-footed mice are among the most attractive mammals inhabiting our woodlands and fields. The males and females are similarly colored. The soft full pelage of adults ranges in coloration from grayish to sandy or golden brown on the upperparts and is sharply distinguished from the pure white underparts. The tail is bicolored also, the upperpart being similar in coloration to that of the back and white below. The genus varies in coloration according to the climate it inhabits. Those species inhabiting the light sands of Florida and southwestern United States are very light in coloration whereas those forms which live in the dark rain forests of the Pacific northwest are quite dark. All members of this genus, however, have white feet. After the adult pelage is attained, moulting takes place only once yearly, usually in late summer or early fall in the temperate region.

White-footed mice may he distinguished from the common house mouse (Mus musculus) by their larger and heavier form, conspicous black protruding eyes, larger ears, and more densely haired bicolored tail. The house mouse is usually a uniform brownish-gray, and although it may have light underparts. this species never has pure white feet as do Peromyscus.



The author's pet white-footed mouse, "Mary," nursing her first litter.

Although they are abundant, many people are not aware of their presence because it is not until after dusk that these nimble creatures emerge from the safety of their retreats to begin the night's activities. It is probably because of their small size and relative lack of physical defense against predators that they have sought the safety of darkness. They are well adapted to the nocturnal life they lead in that their large black eyes are especially developed for seeing in subdued light; their long whiskers are sensitive to touch and are thus valuable sense organs, forewarning the mouse of obstructions while it scampers about in the darkness; the large thinly clad ears enable it to detect the possible approach of predators; and the coloration of their upperparts blends in well with their habitat.

These mice are noted for their curiosity and they will thoroughly explore all objects within their home territory, from underground burrows to the branches of shrubs. This careful observation of their surroundings serves a useful purpose in that when they are pursued by a predator, within a few leaps they can vanish from sight into a previously explored niche or cranny. Although most forms do not normally live in trees, they are able to climb about slender twigs with considerable agility and swiftness. Unlike the meadow mouse (Microtus), these active creatures do not regularly traverse the same path to form beaten runways but, nevertheless, white-footed mice do not hesitate to use their neighbor's pathway when convenient. Peromyscus are active throughout the year, their dainty tracks in the snow during the coldest months of mid-winter are evidence that even sub-zero temperatures do not keep them at home. During the daytime in periods of cold weather, several huddle together in their nest to conserve body heat. Occasionally in winter, individuals may take up temporary habitation in country homes but they almost never venture into areas of dense human population. When excited or alarmed, both sexes rapidly vibrate the front feet and when this is done on a dry leaf or piece of bark it acts as a resonating surface and a buzzing sound is audible for considerable distance. Recent studies have shown that the majority of individuals seldom venture more than 500 feet from the place of their birth. They are very fastidious about their cleanliness and spend a great deal of time grooming themselves, licking their coat and with moistened paws washing all parts of their body that they cannot reach with their tongue.

Nests, from a few inches up to a foot in diameter, are constructed primarily of shredded plant material and are located in such retreats as hollow logs, brush piles, under rocks and in trees. Occasionally they remodel abandoned bird nests by roofing them over for their own use or occupy the discarded underground burrows of other mice.

SEPTEMBER, 1962 21



"Mary," washing one of her 14-day-old youngsters.

In captivity, at least, the male usually assists the female in constructing the nest. They usually have a definite place for urination and defecation to which they regularly go but eventually the nest becomes soiled and, rather than clean the used one, they construct a new nest, usually in a different location. Generally a single family occupies a given nest.

White-footed mice eat a wide variety of food such as nuts, berries, grains, fruits, insects, worms, carrion and various vegetable matter. In the colder parts of their range they hoard food, usually nuts, for use during the winter when the food supply is scarce. This food is transported to their secret granaries, located in any convenient hollow, by means of small internal cheek pouches. They accumulate up to several quarts of stored food.

Sexual maturity is reached in about two months and the female is most fertile when she is from four months to one year of age. In the warmer parts of their range, breeding takes place throughout the year, whereas in the north it usually occurs from April to October. In captivity, females have been observed to produce 10 to 15 litters per year. The gestation period is usually 21 to 27 days, but is somewhat prolonged if the female is nursing during pregnancy. One to nine, but usually three or four, wrinkled, naked, blind, and brightly flesh-colored young constitute a litter. The females have four or six functional mammae and, like most mammals, will reduce the size of their litters soon after birth so that there will not be more young than functional mammae. Within a few days the backs of the babies darken and the underparts lighten due to the rapid growth of downy hairs. For the first several weeks the fect appear flesh colored since the growth of fine white hairs is quite scant. Although their movements are limited, at this early age they begin to wash themselves. In 12 to 15 days the eyes open, at which time the youngsters are fully haired and are able to move about clumsily. but continue to nurse a week or more longer.

Observations of individuals in captivity show that the female seldom shows any antagonism toward the male before, during, or after giving birth and at all times they share the same nest box. The female is a good mother and in some instances both parents care for the young. Males frequently stand protectively over the youngsters when they are being molested or disturbed. Under normal conditions the female transports her youngsters by carrying them individually in her mouth by the nape of the baby's neck, but when she is suddenly alarmed or disturbed, the mother drags her little ones while they cling tenaciously to her nipples as she hurries to safety.

If the pair is left together, the female usually will become

pregnant again within 24 hours following parturition. Normally, most *Peromyscus* make good and affectionate parents but, especially in captivity, when they are subjected to abnormal conditions which cause them strain and worry, it will result in abnormal behavior. Although individuals have been reported to live up to nine years in captivity, in the wild the life span is, no doubt, considerably less.

Because they are clean, practically odorless, and easily fed, these mice make ideal pets. Cages should be no smaller than 10" x 12" x 12" and should be well ventilated, the more roomy the cage the better. An easily constructed and satisfactory enclosure can be made from quarter inch galvanized hardware cloth and an enamelled pan or baking pan. Cut and bend the wire so that there are four sides and a top but no bottom: into the top or side put a door. Be certain that the length and width of the cage are slightly less than the inside measurements of the enamel pan. Place about one inch of clean, fine, dry sand in the bottom of the pan for the animals to roll in as this extracts excess oil from the fur. The interior of the cage should be provided with slender twigs, elevated ledges, rocks, and an exercise wheel so that they can carry on their normal activities. A nest box should also be included in the cage, preferably of wood or cardboard, with a hole about the size of a 25-cent piece, to provide a safe, dark retreat which will shelter them from the bright daylight hours. At first, provide some leaves, excelsior, cotton or similar material which the animals will shred to make soft nesting material. Water should be available at all times; shallow glass furniture casters serve well since they do not easily tip over, are easily cleaned, and youngsters are not so likely to drown in them. Every evening place a wide variety of food in the cage and in the morning remove that which has not been eaten. By providing them with a wide selection of food, the creatures will be able to select that which best suits their needs since they are not free to choose their food from the wild.

Their playful and charming antics are enjoyable and interesting to watch. It must be kept in mind that animals, like humans, are individuals, each having its own temperament. Therefore, what may be true for one individual does not necessarily indicate that that mood is characteristic of all.

In addition to serving a useful purpose in laboratories for physiological and genetic studies because of their rapid rate of reproduction, cleanliness, great numbers, varied habits and wide distribution, members of this genus are also one of the principal prey species of North America, being hunted by snakes, hawks, owls and numerous carnivores. In this capacity they play an important role in the balance of nature. Occasionally those living near cultivated areas eat and carry away grain but this damage is offset in that they perform a useful service to man by destroying large amounts of weed seeds, insects, larvae, and grubs during the summer months.

Occasionally, they become nuisances in park cabins, summer cottages and camps which they enter and use mattress stuffing for nesting material, gnaw holes in food sacks, eat foodstuffs, and sometimes cause sleeplessness by their nocturnal scampering between walls and on roofs. However, the creatures can prove to be either mischievous pests or interesting neighbors, depending on the attitude of the human occupant,



Edited by DOROTHY ALLEN



John E. Pearman

"Thanks" From Contest Winner

Following is a letter from John E. Pearman, who has just completed the fifth grade at Price's Fork Elementary School. John, who lives in Cambria, won a special mention prize for his essay entered in the 15th Annual Wildlife Essay Contest.

"I want to thank you for the opportunity to write an essay on hunting laws and wildlife conservation. I thank you too, for the \$5.00 special mention prize, the nice certificate (which my Daddy will frame for me), and for the subscription to VIRGINIA WILDLIFE magazine. My cousin and I like it very much; I share it with him.

"I was very proud to accept the prize which was presented to me at the closing program of our school this June. You see, I was the only pupil in Montgomery County Schools to win a prize. My parents and my fifth-grade teacher, Mrs. Beverly Bowers, were very proud of the prize, too.

"I am old enough to hunt and fish with my Daddy now, and we will get much valuable information from the magazine. The laws of hunting and fishing have helped us a lot to do what we can to preserve all kinds of wildlife."

(Editor's Note: One other Montgomery County pupil took honors in the eontest: Carolynne Lorek, 7th grader at McHarg School, whose honorable mention entry won her \$10.00. Congratulations to both John and Carolynne for outstanding efforts.)

IWLA Fishing Rodeo

The Fredericksburg Chapter, IWLA. held its annual fishing rodeo in June at its seven-acre Waltonian pond. Approximately 300 attended. The human-fence fishermen surrounded the pond and dangled over 200 lines in the water. Surprisingly, only fish were hooked!

We of the League are grateful for the help we get from the game wardens and the precision with which they conduct their jobs. They are indeed a credit and an asset to the State and all organizations. We in Fredericksburg are proud to be associated with people of such fine character.

Wardens Robert Crigler, Madison County, Bill Crickenberger, Orange County, Francis C. Boggs, Spotsylvania County, B. W. Davis, Sheriff, Spotsylvania County, and Hawes Coleman of the sheriff's department, Spotsylvania County, were judges.

Robert W. Coble, Chief of Police, Fredericksburg, stated that the more teenagers you take fishing the less delinquents you will have in courts later.

Melford Haynes, police chief of Mary Washington College, was the chapter's chairman in charge of transportation.

The Chancellor Explorer Scouts presented a canoe safety demonstration and Fredericksburg's rescue squad conducted a demonstration on artificial respiration. The children's interest in these safety demonstrations was so great that we decided that there is no better time or place to start safety in a child's mind than at this age, so from now on we shall add this to our program.

After two hours of fishing, prizes donated by the merchants of Fredericks-burg were awarded the 16 winners.

In less than one hour 500 hot dogs and 15 cases of soft drinks, plus populates, were devoured by the hungry fishermen with not a crumb left for the resident birds.

The affair ended on an extremely tired but happy note—no one was hooked or injured.

Sam L. Hayden, Past President Fredericksburg Chapter, IWLA



dopewell News Photo

George Angone, 14, and Don Horner, 16, of Hopewell bagged these raccoons while hunting in Prince George Co., near Appomattox River.

Students Win Awards

The Sterling Point Garden Club of Portsmouth, member of the Virginia Federation of Garden Clubs, received the State award for Conservation at the organization's state convention in Roanoke in May. The following Junior awards were made:

Olive Culpepper Award—Joan Whiteside, of the Bay Haven Jr. Garden Club, Norfolk,

Jay Donohue Award for best scrapbook on birds—1st. Christine Iverson, Bay Haven Jr. Garden Club, Norfolk; 2nd. Jannie Lewis, Jr. Greenies Garden Club, Richmond.

Evie Key Conservation Award for best scrapbook on trees—1st. Linda McGinn, Bay Haven Jr. Garden Club; 2nd. Pamela Ann Peters, Jr. Greenies Garden Club.

Maude Timberlake Award for best litterbug posters by a junior—Bonnie McGinn. Bay Haven Jr. Garden Club.

Bess Stoner Award for best scrapbook on any phase of Nature Study—lst, Joan Whiteside. Bay Haven Jr. Garden Club, Norfolk; 2nd. Mary Louise Graff, Shenandoah Jr. Garden and Bird Club.

Thelma Loyd Achievement Award for most outstanding high school gardeners club was won by Teen Chapter, James-Rivanna Garden Club. Carysbrook.

Mrs. Dave Satterfield. Jr. Awards for best scrapbook on native Virginia animals and/or fishes and/or reptiles: 1st, Bonnie McGinn and 2nd, Star Belson, both members of the Bay Haven Jr. Garden Club. Norfolk.

23



Edited by HARRY GILLAM

Stras Retires, Watkins Elected Chairman, Gunter Appointed In Commission Changes

Tscharner D. Watkins of Midlothian has been elected Chairman of the Virginia Commission of Game and Inland Fisheries. Watkins succeeds Beverley W. Stras. Jr., who retired after serving on the Commission for 36 years, the last 18 of which were in the capacity of Chairman.

Watkins' love of the outdoors extends into his business. Watkins Nurseries, from which he is semi-retired. He attended Virginia Tech for two years, was in the army for one, then graduated from the University of Massachusetts with a degree in landscape gardening. Watkins Nurseries is 86 years old and now is in its third generation, with "my son old enough to take over," Watkins says.

Besides his hunting and fishing background. Watkins brings a varied history of public service to the office. He served on the Board of Supervisors for Chesterfield county from 1910-18 and on the Welfare Board of that county for approximately the same time. He also served on the State Selective Service Appeal Board for eight years and has been a member and chairman of the Red Cross board. He was appointed to the Game Commission as Commissioner from the Third Congressional District by Governor William Tuck in 1947, and has been reappointed to six year terms twice.

Watkins' wife, Charlotte, neither hunts nor fishes, but two sons, Tscharner, Jr., 31, and Chris, 10, both seem to have inherited their father's love of nature.

Beverley W. Stras Jr., of Tazewell, immediate ex-chairman of the Commission and commissioner with the longest service record, retired from the Commission on June 30. Stras first served on the Commission in 1926 when he was appointed by Governor Byrd as one of the five commissioners when the organization was separated from the Commissioners was separated from the Commissioners.



Commission Photo by Gillam Beverley W. Stras, Jr.



Patterson Photographic Service Ralph G. Gunter

sion of Fisheries. He served in this capacity until October 1939. He was appointed as one of nine commissioners on the Commission of Game and Inland Fisheries following a reorganization in July 1942. He was elected to the chairmanship in 1944 and has served ably in that capacity until his recent retirement.

Retiring chairman Stras was honored at a ceremony held in the Game Commission Building in Richmond on July 19. The highlight of the event was the unveiling of an oil portrait of Mr. Stras which was presented for permanent display in the Commission hearing room as a parting gift from his fellow commissioners. Many friends and admirers of Mr. Stras attended the ceremony.

Stras, a resident of Tazewell, attended the Episcopal High School in Alexandria and obtained his B.A. degree from Hampden Sydney college. He earned his law degree at the University of Virginia.

Although retired from active participation in business, Mr. Stras is president of the Kentucky Cardinal Coal Company and president of the Farmers Bank of Clinch Valley.

Under rules adopted in 1955. Mr. Stras was ineligible for reappointment.

Ralph G. Gunter, a 45-year-old dairy farmer and businessman from Abingdon, Virginia, was appointed by Governor Albertis S. Harrison to represent citizens of the ninth congressional district on the 10-man Virginia Commission of Game and Inland Fisheries. Mr. Gunter's appointment began July 1, 1962, and will end June 30, 1968.

Born in Patrick County, Gunter has been active in the business and civic affairs of Washington County since he took up residence there about 20 years ago. He and his wife, Louise, live at Abingdon where he owns three grade A dairy farms and is part owner of the Meadowview Farm Supply. They have one daughter, Mary Elizabeth.

Gunter is chairman of the Washington County Planning Committee and chairman of the Washington County Democratic Committee, He is currently a director of the Farmers Exchange Bank in Abingdon, a director of the Tri-state Milk Producers Association, and a director of the Virginia State Dairyman's Association.

Gunter attended Virginia Polytechnic Institute at Blacksburg, and served as an infantry officer during World War 11. He has always been a very ardent outdoorsman and has the solid support of sportsmen in his area. An avid hunter and fisherman, he understands the desires of sportsmen in his district as well as those of sportsmen in other parts of the state where he hunts and fishes,

Re-appointed for a six-year term on the Commission July 1 was Commissioner R. R. Guest of King George,



Commission Photo by Harrison IWLA Executive Board Chairman Reynolds T. Harnsberger (right) shown with former Governor J. Lindsay Almond and Waltonian George P. Grove.

Harnsberger Heads IWLA Board

Reynolds T. Harnsberger of Markham, Virginia, was elected chairman of the executive board of the Izaak Walton League of America at its annual meeting June 20-24 in Portland, Oregon. The executive board of 13 members carries out the policies of the 75-member board of directors, representing 50.000 members of Izaak Walton League chapters all over America. Mr. Harnsberger has been a member of the executive board since 1959 and a national director since 1957.

The new chairman has been active in the Waltonians since 1935 when he became a charter member of the Arlington-Fairfax chapter. He was president of that chapter for three terms and is a past president of the Virginia division, which he now serves as executive secretary.

A native of Rockingham County, Mr. Harnsberger is currently secretary of the Fauquier chapter of the Izaak Walton League, which he was instrumental in organizing. For several years he was chairman of the Izaak Walton League's state education committee which co-sponsors the wildlife essay contest in Virginia's schools.

Mr. Harnsberger spent 38 years as an attorney and investigator in the office of the Comptroller General of the United States, and is now in private practice.



E. K. Carter Photo
Hayden Lewis of Hematite, Va., bagged this
18-point buck in Alleghany County last season.
Mount by taxidermist E. K. Carter.

National Wildlife Federation To Publish Colorful New Magazine

A colorful new magazine designed to catch and hold the attention of every outdoor enthusiast in America is "on the drawing board" at the National Wildlife Federation's headquarters in Washington, D. C. The Federation has made arrangements with the W.A. Krueger Co. of Milwaukee, Wis .- printers of such high-quality publications as "Arizona Highways" and "Ideals"-to produce a 48-page, bi-monthly magazine called "National Wildlife" which the Federation will make available to its associate members together with other services and benefits. The charter issue will be mailed in December of this year.

"National Wildlife" will be edited by John Strohm—a contributing editor to "Readers Digest," author of two annual books on farming and flowers, a former consultant to the White House, the Secretary of Agriculture and the Secretary of the Interior, and a past president of the American Agricultural Editors Association—in close coordination with the National Wildlife Federation's staff of conservation specialists in Washington. R. B. Kirkpatrick, formerly outdoor editor of "Popular Mechanics" magazine, has been named managing editor.

Sixteen pages of every issue will feature full color artwork and photographs of outdoor America printed by the high-quality "Micro-Color" lithographic process. Editorial content will include a report from Washington on the national conservation picture and articles on such subjects as fishing, hunting, birding, boating, nature study, water sports, hiking, mountain climbing, camping, wilderness areas, and how-to-do-it hints—something for everyone who appreciates the out-of-doors.

As new as the magazine, will be the Federation's associate membership arrangement whereby individuals will be able to join the nation's largest private conservation organization and receive in return not only "National Wildlife" magazine but special membership discounts on the best natural history and travel books, a free "art print of the year," use of the Federation's library and research facilities, a numbered membership card, and a colorful, distinctive membership decal.

Inquiries regarding the forthcoming associate membership opportunity should be mailed to: MAGAZINE, National Wildlife Federation, 1412 Sixteenth Street. N.W., Washington 6, D.C.



"Students" in the conservation short course held June 14-30 at V. P. I. are these Virginia school teachers and three state game wardens—C. R. Chappell of Carroll County (top, 5th from left), W. T. Jamison, Giles County (top, right), and B. S. Denney, Clarke County (extreme right, third row). Agricultural extensionist E. W. Mundie (front, left) directed the course.



Richmond Newspapers Photo

N. A. Totey Vaughan of Richmond poses proudly with the 18-pound gobbler he bagged in Powhatan County during the 1962 spring gobbler season.



The Virginia State Rifle and Revolver Association, Inc., has awarded five silver medals to a Virginia College All-State Rifle Team and five to a Virginia Scholarship All-State Rifle Team. College All-State Rifle Team (top row, from left): Larry L. Sampson, U. of Va. and Elkton, Va.; James W. Marshall, V.P.I. and Arlington, Va.; Charles W. Hoy, V.P.I. and Arlington, Va.; Edward L. Derrenbacker, U. of Va. and Alexandria, Va.; and Robert C. Sinclair (not shown), V.P.I. and Hampton, Va. Scholastic All-State Rifle Team (bottom row, from left): Barry C. Rhodes, Fishburne Military School and McLean, Va.; Bert R. Lennington, Washington-Lee H.S. and Arlington, Va; Ward B. Masden, Washington-Lee H.S. and Arlington, Va; and Lewis W. Ensign, Fishburne Military School and Tampa, Fla.



Edited by JIM KERRICK

Boating Accident Report

During the period January 1, 1962, to July 1, 1962, 38 boating accidents were reported to the Virginia Commission of Game and Inland Fisheries. Twelve persons were injured and 17 lost their lives, Damage from these accidents amounted to \$27,122.

Causes of the accidents were reported as: weather conditions (rough water, strong current and storms)—6; overloading the boat—2; hitting submerged object—7: loss of control—1; failure to comply with rules of the road—2; starting motor in gear—1; overpowered—1; no life preservers—3; fires—2; failure to keep a lookout posted—5; faulty equipment—1: use of intoxicants—1; carelessness ("horseplay")—3; excessive speed—2; operator inexperience—1.

Here are some of the ways the accidents happened and possible ways they could have been avoided:

1. Two men in a boat on a fishing trip were caught by reduced visibility and increasingly rough seas. Unable to get bearings to proceed to shore, the men left the boat and climbed onto a survey tower in the bay for safety. Their boat broke loose from the tower after being battered by high seas, but both men were rescued.

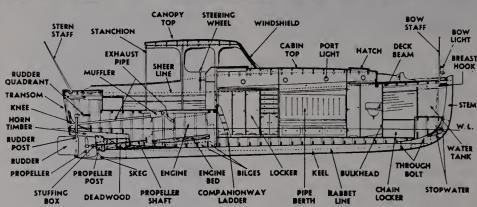
This accident might have been avoided if a closer check on weather conditions had been made and there had been a compass on board.

2. One of two men fishing in a 12-foot boat shifted his position so that both were on the same side of the boat. This caused the craft to take on water and sink.

One of the important things to maintain while in a boat is even distribution of weight.

3. Two men in a boat with no motor drifted too close to a waterfall. The boat went over the fall and capsized. One of its occupants was drowned.

This tragedy could have been avoided if the occupants had taken the precaution to learn about the water they were in and to wear life preservers.



From Motorboating

4. The operator of a boat running at high speed put the vessel in a tight turn, full throttle. Either the wind shifted or the operator had a power failure causing the boat to capsize. One of three occupants was drowned.

This accident could have been avoided if the operator of the boat had slowed down to make his turn and all had been wearing life preservers.

5. One boat was going west; another boat east. The latter made a 90-degree turn into the path of the other boat causing a collision.

This accident could have been avoided if the operators of both boats had abided by the rules of the road with reference to passing another vessel.

6. Five fishermen in a 13½-foot boat were on their return trip when the boat started filling up with water. The boat sank and two persons lost their lives.

First, the boat was overloaded. Second, the weight in the boat was not evenly distributed, for when the motor was shut off all the weight in the boat was forward. The most important factor concerning this accident was that there were not ample life preservers on board for all occupants.

7. A 10-foot boat carrying two adults and three children sank; one adult and one child drowned.

The boat was overloaded and the children were not wearing life preservers. Never overload a boat and be certain that all non-swimmers are wearing life preservers.

8. A child was sitting on the back of

a boat pulling in a ski rope. The rope caught in the propeller of the boat flipping the child into the water. The ski rope tightened around the boy's left arm forming a tourniquet. As a result of the accident, surgery was needed to restore circulation in the arm.

Extreme caution should be exercised when retrieving ski line to insure that the line does not become tangled in the propeller. For this operation the boat should have been brought to a complete stop and the motor shut off.

9. Steering mechanism broke causing a boat to go into a tight left turn. Both occupants were thrown into the water and struck by the propeller.

Each time an operator takes his boat out he should be sure that all the equipment is seaworthy. This is a must, for your life may depend on it.

Equipment Violations Head List

During the period July 1, 1961, to June 30, 1962, 639 citations were issued by Virginia state game wardens for boating violations. Operating boats without prescribed life preservers and safety equipment led the list with 401 violations. One hundred fifty-three citations were issued for operation of a boat without proper registration. 18 for careless and reckless handling of a boat, and 67 for miscellaneous violations such as operating without lights, under the influence of intoxicants or towing skiers illegally.

Is a human life worth less than the price of a life preserver?

LETTERS

UNTIL recently, I have been a resident of Virginia for 15 years and have hunted in and around Augusta County and Big Levels Game Reserve. I have also been a subscriber to VIRGINIA WILDLIFE since 1957. And, although I am a native of North Carolina originally and am living here again, I can't help feeling the mountains of Virginia and the state itself are a permanent part of my life.

And through the VIRGINIA WILDLIFE magazine I have learned and feel that I know as much about Virginia as though I were a native son. I look forward with anticipation each month to my issue of the WILDLIFE.

J. L. Woodell Durham, North Carolina

WHILE I was looking over some previous VIRCINIA WILDLIFE magazines, I came across a letter that interested me. It was Henry Page's, in the December 1961 issue.

I also think that there is a serious loophole in our hunting regulations. I think that there should be a minimum muzzle energy requirement for big game rifles, also a bullet weight requirement. About 1500 foot pounds of energy seems about right to me. The bullet weight matter is a little more tricky. My opinion on this is that it should be at least 100 grains. Why 100 grains? Well, because some cartridges like the 243 Win, with the 80 grain bullets develop 2180 foot pounds, but because of the high velocity (3500 f.p.s.) and light bullet construction, they are unfit for big game.

On the subject of black powder cartridges, there wouldn't be anything wrong with using them if they met the requirements. But it must be recognized that 90 percent of them are useless on deer and bear.

Richard B. Lennington Arlington, Virginia

IN THIS region, Fairfax and Prince William counties, we have had this year two population explosions of insects which must contribute greatly to fish growth. There is an uncommon lot of Japanese beetles distributed along stream and lake shores, on grapevines, sassafras, blackberry bushes, dock and other stream-side trees, bushes and weeds. I go fishing occasionally with two quite young grandsons, and they have no end of fun in picking off the Jap beetles and throwing them into the water, where they are almost always snapped up by small bass and bluegills.

Not so generally distributed are the 13 year cicadas. This year there was a big batch and the fish have a picnic with them. Since these cicadas suck their sustenance from tree roots for 13 years, when their big luscious (to the fish) bodies fall into the water the fish that grab them get a lot of food.

The big batch of the 17-year locusts I noticed particularly came in 1919. These locusts came up everywhere. They would crawl up weed sticks and small plants, rather inactive as they first came out of the ground. We had a small flock of chickens and some young turkeys at the time. First thing in the morning the chicks and turks would find and eat them with much gusto, then one would see a poult come up to one, eye it for a bit, as though it had had enough. Perhaps it would grab the insect but didn't seem too disappointed if it flew away.

Naturally fish do not bite well when gorged with Jap beetles and cicadas. But in the long run these insects should improve the fishing.

Anonymous

THE subject matter in your fine magazine is well chosen and expertly written. The Commission is to be complimented on its intelligent management measures, I have seen ample evidence of their efforts in the Virginia woods and look forward to many more visits although I am not a native son.

John Luft
Col. USAF
Carswell AFB, Texas

THIS may be my last renewal as my "hour glass" is running very low, but I must say you have the best magazine in the field; I enjoy every issue. I save all outdoor magazines and, with the Elks Lodge here, take them to the Veterans Hospital in Dayton, Ohio, once a year. At the same time we give the patients an evening's entertainment, which the fellows enjoy.

William C. Kettler Hamilton. Ohio

HAVE been reading your magazine for the past three years and enjoy it the most. I am in the navy and away from home most of the time. Born and raised in Pittsylvania County, I enjoy reading and finding out what is going on in the wildlife field in Virginia.

Thomas S. Giles
U. S. Naval Base, Annex
Key West, Florida

I REALLY enjoy reading the up-to-date material you people publish for the anglers and hunters to keep up on and be a part of if they want to be. I have taken vacations the last three years to hunt and will have to say that I enjoy myself on these more than anything else I could possibly do. The people are so

TIPPER FLINTLOCK says...
"Tired?
Don't lean on your gun; pick a tree, post or fence; this is good gun sense."
the national rifle association teaches shooting safety

friendly that you feel as if you are right at home

James R. Boggess Nitro, West Virginia

I WOULD like to congratulate the game and fish commission on the excellent stocking of trout in Page County and hope that they continue the good work. I am sure most of the fishermen are very happy, including myself. I caught one brook trout about 11 inches long—first one I ever caught in Virginia—in Cub Run, Page County.

Now, about small game: An early squirrel season—lst to 15th of October—is too early as we have so many "wolves" in the animals west of the Ridge. I went two times last year, shot two each time, and they all had the "wolves" in them, so I quit hunting squirrels for the season.

As for deer, I would like to see a two-weeks season about December 1-15. I am a walking deer hunter; never stand; sneak up on them. last year I got a nice 125-pound doe.

C. J. Stallman Shenandoah, Virginia

THE PICTURE of a fish rodeo on page 18 of the June issue of VIRGINIA WILDLIFE really interested me. If the Izaak Walton League wants to make children and young people interested in fishing, why don't they let them know what real fishing is? That picture looks like opening day on a crowded trout stream.

I certainly do like your fine magazine, and those articles and photographs on flycasting and spincasting were not only interesting but very informative. The beautiful covers, however, are my favorites.

Your series, "Wildlife Conservation—Fish and Fishing," is very good and several parts have helped me in my school work, especially in biology.

> Grey Hesson Gladstone, Virginia

I HAVE talked with several sportsmen in this area of Alleghany, Bath and Highland counties and we, along with many others, agree most emphatically that there should be a season and a big limit set on ground hogs. It is truly a shame to see how rapidly this little "game" animal is disappearing from our section of the state. I have hunted ground hogs in Bath and Highland for years, and each year I can see the situation worsen. There are many so-called "sportsmen" who ride the roads in their cars, four, five or six to each car, and all shoot at the same ground hog, in some farmer's pasture field, at the same time. I have seen this done several times, and it's nothing but a slaughter; no sport involved whatever.

The ground hog provides many hours of excellent sport for many people, but he can't survive without some degree of protection. I think there should be a closed season from March 1 through June 15, thus giving the young a chance to get started on their own. The landowner or his tenants should, of course, be permitted to kill those few animals which are actually damaging his crops or property.

Let's try to keep this fine little animal around so that the future generation will know the joy of the excellent sport of ground-hog hunting.

James Elwood Cronk Clifton Forge, Virginia

\$3000.00 IN PRIZES!

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SPONSORED BY: The Virginia Commission of Game and Inland Fisheries and the Virginia Division of the Izaak Walton League of America.

ENDORSED BY: The Virginia Resource-Use Education Council and the Resource-Use Education Committee of the Virginia Academy of Science.

APPROVED BY: The Virginia State Board of Education.

September 15, 1962-January 15, 1963

SUBJECT:

the Importance of **Conservation Education** in the school curriculum.





- 1 High School Senior Conservation Scholarship
 - \$800.00
- 8 Grand Prize Awards, \$50.00 each, one to each eligible grade
- 8 Second Prizes, \$25.00 each, one to each eligible grade
- 24 Third Prizes, \$15.00 each, three to each eligible grade
- 24 Honarable Mention Prizes, \$10.00 each, three to each eligible grade Special Mention Prizes, \$5.00 each, divided among eligible grades in pro-

The scholorship winner and the eight grond prize winners will come to Richmond os guests of honor of the spansors and will have their awards presented to them by the Governor, Others will be given their awards in the schools.

ASK YOUR TEACHER TO ENTER YOUR SCHOOL NOW!!

RULES

- 1. Students from oll Virginio schools, grodes 5-12 inclusive, ore eligible.
- Essays must be submitted through the schools participating. To be eligible, schools must submit an official entry cord. Completed entry cards, when received, will result in contest headquarters mailing out reference materials.
- 3. Each essay submitted must indicate in the upper right hand corner: county, city, school, school address, principal, grade, name.
- High school seniors competing for the scholorship must submit a completed scholarship form, obtainable from Contest Headquarters, attached to their essays.
- 5. Essays should not exceed 1000 words.
- 6. Essays will be judged on the basis of originality, effort, grammor, expression, and grosp of the subject. Final judging will be made by a ponel of three judges representing the Commission of Gome and Inland Fisheries, the Virginia Divisian of the Izook Walton League of America, and the Virginia State Department of Education.
- All essays MUST be sent prepaid or delivered to the Commission of Game and Inland Fisheries, 80x 1642, Richmond 13, Virginia, and postmorked not later than January 15, 1963. Teachers are urged to send in ALL essoys.
- School awards will be made on the basis of response and quality of